STATE OF NEW MEXICO
ENVIROMENTAL IMPROVEMENT BOARD

IN THE MATTER OF
PROPOSED NEW REGULATION
20.2.50 NMAC NO. EIB-21-27 (R)
Oil and Gas Sector – Ozone Precursor Pollutants

CENTER FOR CIVIC POLICY AND NAVA EDUCATION PROJECT'S NOTICE OF INTENT TO PRESENT REBUTTLE TECHNICAL TESTIMONY

The Center for Civic Policy ("CCP") and NAVA Education Project ("NAVA EP"), submits their Notice of Intent to Present Rebuttal Testimony.

Joint Proposed *Revised* Amendments to Proposed 20.2.50 NMAC from EDF, Clean Air Advocates, Center for Civic Policy, and NAVA Education Project

On July 28, 2021, CCP and NAVA EP, along with Environmental Defense Fund and Clean Air Advocates, filed Joint Proposed Amendments to Proposed 20.2.50 NMAC, along with direct testimony and exhibits in support.

After the initial filings CCP and NAVA EP participated in discussions with the parties named above and other parties to discuss how these proposed changes could be strengthened to improve public health protections and at the same time make these provisions easier to implement.

Based on these conversations, our coalition is filing Joint Proposed *Revised* Amendments to Proposed 20.2.50 NMAC that reflects these discussions, which are included here as **CCP and NAVA EP Exhibit 5**. *See also* Rebuttal Testimony of James Povijua, Ex. 8.

The revised amendments would implement the following four changes:

- Increase the frequency of leak detection and repair inspections at wellhead sites located within 1,000 feet of homes, schools, and businesses in order to better protect the health of frontline communities;

- Increase the timetable to retrofit pneumatic controllers to increase emission reductions from those devices, which are significant;

- Require emissions from completions and recompletions of wells to be captured instead of vented or flared; and

- Require automatic vessel measurement systems on new storage vessels to minimize venting of emissions from those devices.

Rebuttal Testimony and Exhibits

1. **Identify the parties for whom the witnesses will testify**

The two witnesses identified below, Prof. Clifford J. Villa and James Povijua (Warren James Honaberger) will testify on behalf of CCP and NAVA EP.

2. **Identify the technical witness (and non-technical witness) the parties intend to present and state the qualifications of those witnesses, including a description of their educational and work background**:

CCP and NAVA EP intend to present the following **technical witness** in this matter for rebuttal testimony: Clifford J. Villa. Clifford Villa is a tenured professor of University of New Mexico School of Law who also served as an attorney at the United States Environmental Protection Agency. Prof. Villa's qualifications, including his educational and work background, are described in detail in his curriculum vitae, attached as **CCP and NAVA EP Exhibit 7**.

CCP and NAVA EP also intend to present the following **non-technical witness** in this matter for rebuttal testimony: James Povijua. Mr. Povijua is the policy director of the Center for Civic Policy and his resume was attached to CCP and NAVA EP's July 28 Notice of Intent to Provide Non-Technical Witness Testimony as **CCP and NAVA EP Exhibit 2.**

3. Include a copy of the rebuttal testimony of the witnesses.

A copy of the rebuttal testimony of CCP and NAVA EP's technical witness, Clifford Villa, identified above, is attached and designated as **CCP and NAVA EP Exhibit 6.**

A copy of the rebuttal testimony of CCP and NAVA EP's non-technical witness, James Povijua, identified above, is attached and designated as **CCP and NAVA EP Exhibit 8.**

4. Include the text of any recommended modifications to the proposed regulatory change

CCP and NAVA EP's revised proposed modifications to the New Mexico Environment Department's ("NMED") proposed adoption of 20.2.50 NMAC, as provided in NMED's May 6, 2021, Petition for Regulatory Change, are attached as **CCP and NAVA EP Exhibit 5.**

5. List of exhibits

Below is a list of all direct and rebuttal exhibits to be offered by CCP and NAVA EP in support of their testimony. CCP and NAVA EP direct exhibits were filed July 28, 2021. CCP and NAVA EP rebuttal exhibits are attached. CCP and NAVA EP reserves the right to offer sur-rebuttal exhibits.

Exhibit	Description	Page Number in Rebuttal NOI
	DIRECT EXHIBITS	
Ex. 1	CCP, NAVA EP, and Common Interest Allies' Proposed Amendments to 20.2.50 NMAC	N/A
Ex. 2	Resume of James Povijua	N/A
Ex. 3	Direct Testimony of James Povijua	N/A
Ex. 4	Direct Testimony of Joseph F. Hernandez	N/A
	REBUTTAL EXHIBITS	
Ex. 5	Joint Proposed Revised Amendments to Proposed 20.2.50 NMAC	9
Ex. 6	Rebuttal Testimony of Clifford Villa	44
Ex. 7	Curriculum Vitae of Clifford Villa	63
Ex. 8	Rebuttal testimony of James Povijua	72

WHEREFORE, CCP and NAVA EP respectfully request that the Environmental Improvement Board accept this Notice of Intent to Present Rebuttal Technical Testimony on behalf of CCP and NAVAEP.

Respectfully submitted,

By: _/s/ Travis Shimanek_____

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Certificate of Service

I certify that a copy of the foregoing pleading was emailed to the following on September 7, 2021:

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CCP AND NAVA EP EXHIBIT 5

JOINT PROPOSED REVISED AMENDMENTS TO PROPOSED 20.2.50 NMAC FROM

ENVIRONMENTAL DEFENSE FUND

AND

CONSERVATION VOTERS NEW MEXICO, DINÉ C.A.R.E., EARTHWORKS, NATIONAL PARKS CONSERVATION ASSOCIATION, NATURAL RESOURCES DEFENSE COUNCIL, SAN JUAN CITIZENS ALLIANCE, SIERRA CLUB, 350 NEW MEXICO, AND 350 SANTA FE

AND

CENTER FOR CIVIL POLICY AND NAVA EDUCATION PROJECT

JOINT PROPOSED REVISED AMENDMENTS TO PROPOSED 20.2.50 NMAC **September 7, 2021**

TITLE 20 ENVIRONMENTAL PROTECTION
CHAPTER 2 AIR QUALITY (STATEWIDE)
PART 50 OIL AND GAS SECTOR – OZONE PRECURSOR POLLUTANTS

20.2.50.1 ISSUING AGENCY: Environmental Improvement Board.
[20.2.50.1 NMAC – N, XX/XX/2021]

20.2.50.2 SCOPE: This Part applies to sources located within areas of the state under the board's jurisdiction that, as of the effective date of this rule or anytime thereafter, are causing or contributing to ambient ozone concentrations that exceed ninety-five percent of the national ambient air quality standard for ozone, as measured by a design value calculated and based on data from one or more department monitors. Once a source becomes subject to this rule, the requirements of the rule are irrevocably effective unless the source obtains a federally enforceable air permit limiting the potential to emit to below such applicability thresholds established in this Part.
[20.2.50.2 NMAC – N, XX/XX/2021]

20.2.50.3 STATUTORY AUTHORITY: Environmental Improvement Act, Section 74-1-1 to 74-1-16 NMSA 1978, including specifically Paragraph (4) and (7) of Subsection A of Section 74-1-8 NMSA 1978, and Air Quality Control Act, Sections 74-2-1 to 74-2-22 NMSA 1978, including specifically Subsections A, B, C, D, F, and G of Section 74-2-5 NMSA 1978 (as amended through 2021).
[20.2.50.3 NMAC - N, XX/XX/2021]

20.2.50.4 DURATION: Permanent.
[20.2.50.4 NMAC - N, XX/XX/2021]

20.2.50.5 EFFECTIVE DATE: Month XX, 2021, except where a later date is specified in another Section.
[20.2.50.5 NMAC - N, XX/XX/2021]

20.2.50.6 OBJECTIVE: The objective of this Part is to establish emission standards for volatile organic compounds (VOC) and oxides of nitrogen (NO_x) for oil and gas production, processing, and transmission sources.
[20.2.50.6 NMAC - N, XX/XX/2021]

20.2.50.7 DEFINITIONS: In addition to the terms defined in 20.2.2 NMAC - Definitions, as used in this Part, the following definitions apply.

A. "Approved instrument monitoring method" means an optical gas imaging, United States environmental protection agency (U.S. EPA) reference method 21 (RM21) (40 CFR 60, Appendix B), or other instrument-based monitoring method or program approved by the department in advance and in accordance with 20.2.50 NMAC.

B. "Auto-igniter" means a device that automatically attempts to relight the pilot flame in the combustion chamber of a control device in order to combust VOC emissions, or a device that will automatically attempt to combust the VOC emission stream.

C. "Bleed rate" means the rate in standard cubic feet per hour at which natural gas is continuously or intermittently vented from a pneumatic controller.

D. "Calendar year" means a year beginning January 1 and ending December 31.

E. "Centrifugal compressor" means a machine used for raising the pressure of natural gas by drawing in low-pressure natural gas and discharging significantly higher-pressure natural gas by means of a mechanical rotating vane or impeller. Screw, sliding vane, and liquid ring compressor is not a centrifugal compressor.

F. "Closed vent system" means a system that is designed, operated, and maintained to route the VOC emissions from a source or process to a process stream or control device with no loss of VOC emissions to the atmosphere.

G. "Commencement of operation" means for an oil and natural gas wellhead, the date any permanent production equipment is in use and product is consistently flowing to a sales lines, gathering line or storage vessel from the first producing well at the stationary source, but no later than the end of well completion operation.

H. "Component" means a pump seal, flange, pressure relief device (including thief hatch or other

opening on a storage vessel), connector or valve that contains or contacts a process stream with hydrocarbons, except for components where process streams consist solely of glycol, amine, produced water or methanol

I. **"Connector"** means flanged, screwed, or other joined fittings used to connect pipe line segments, tubing, pipe components (such as elbows, reducers, "T's" or valves) to each other; or a pipe line to a piece of equipment; or an instrument to a pipe, tube or piece of equipment. A common connector is a flange. Joined fittings welded completely around the circumference of the interface are not considered connectors for the purpose of this Part.

J. **"Construction"** means fabrication, erection, installation or relocation of a stationary source, including but not limited to temporary installations and portable stationary sources.

K. **"Custody transfer"** means the transfer of oil or natural gas after processing or treatment in the producing operation, or from a storage vessel or automatic transfer facility or other processing or treatment equipment including product loading racks, to a pipeline or any other form of transportation.

L. **"Control device"** means air pollution control equipment or emission reduction technologies that thermally combust, chemically convert, or otherwise destroy or recover air contaminants. Examples of control devices include but are not limited to open flares, enclosed combustion devices (ECDs), thermal oxidizers (TOs), vapor recovery units (VRUs), fuel cells, condensers, air fuel ratio controllers (AFRs), catalytic converters (oxidative, selective, and non-selective), or other emission reduction equipment. A control device may also include any other air pollution control equipment or emission reduction technologies approved by the department to comply with emission standards in this Part.

M. **"Department"** means the New Mexico environment department.

N. **"Downtime"** means the period of time when equipment is not in operation, or when a well is producing, and the control device is not in operation.

O. "**Drilling**" or "**drilled**" means the process to bore a hole to create a well for oil and/or natural gas production.

P. **"Drill-out"** means the process of removing the plugs placed during hydraulic fracturing or refracturing. Drill-out ends after the removal of all stage plugs and the initial wellbore cleanup.

Q. **"Enclosed combustion device"** means a combustion device where gaseous fuel is combusted in an enclosed chamber. This may include, but is not limited to an enclosed flare, reboiler, and heater.

R. **"Existing"** means constructed or reconstructed before the effective date of this Part and has not since been modified or reconstructed.

S. **"Flowback"** means the process of allowing fluids and entrained solids to flow from a well following stimulation, either in preparation for a subsequent phase of treatment or in preparation for cleanup and placing the well into production. The term flowback also means the fluids and entrained solids flowing from a well after drilling or hydraulic fracturing or refracturing. Flowback ends when all temporary flowback equipment is removed from service. Flowback does not include drill-out.

T. **"Flowback vessel"** means a vessel that contains flowback

U. **"Gathering and boosting station"** means a permanent combination of equipment that collects or moves natural gas, crude oil, condensate, or produced water between a wellhead site and a midstream oil and natural gas collection or distribution facility, such as a storage vessel battery or compressor station, or into or out of storage.

V. "**Hydraulic fracturing**" means the process of directing pressurized fluids containing any combination of water, proppant, and any added chemicals to penetrate tight formations, such as shale, coal, and tight sand formations, that subsequently require flowback to expel fracture fluids and solids.

W. "**Hydraulic refracturing**" means conducting a subsequent hydraulic fracturing operation at a well that has previously undergone a hydraulic fracturing operation.

X. **"Glycol dehydrator"** means a device in which a liquid glycol absorbent, including ethylene glycol, diethylene glycol, or triethylene glycol, directly contacts a natural gas stream and absorbs water.

Y. **"Hydrocarbon liquid"** means any naturally occurring, unrefined petroleum liquid and can include oil, condensate, and intermediate hydrocarbons.

Z. "Inactive wellhead site" means a wellhead site where the well is not being used for beneficial purposes, such as production or monitoring, and is not being drilled, completed, repaired or worked over.

AA. "Injection wellhead site" means a wellhead site where the well is used for the injection of air, gas, water or other fluids into an underground stratum.

BB. **"Liquid unloading"** means the removal of accumulated liquid from the wellbore that reduces or stops natural gas production.

CC. **"Liquid transfer"** means the loading and unloading of a hydrocarbon liquid or produced water between a storage vessel and tanker truck or tanker rail car for transport.

DD. "Local distribution company custody transfer station" means a metering station where the local distribution (LDC) company receives a natural gas supply from an upstream supplier, which may be an interstate transmission pipeline or a local natural gas producer, for delivery to customers through the LDC's intrastate transmission or distribution lines.

EE. "Natural gas compressor station" means one or more compressors designed to compress natural gas from well pressure to gathering system pressure before the inlet of a natural gas processing plant, or to move compressed natural gas through a transmission pipeline.

FF. "Natural gas-fired heater" means an enclosed device using a controlled flame and with a primary purpose to transfer heat directly to a process material or to a heat transfer material for use in a process.

GG. "Natural gas processing plant" means the processing equipment engaged in the extraction of natural gas liquid from natural gas or fractionation of mixed natural gas liquid to a natural gas product, or both. A Joule-Thompson valve, a dew point depression valve, or an isolated or standalone Joule-Thompson skid is not a natural gas processing plant.

HH. "New" means constructed or reconstructed on or after the effective date of this Part.

II. "Occupied area" means (1) a building or structure designed for use as a place of residency by a person, a family, or families. The term includes manufactured, mobile, and modular homes, except to the extent that any such manufactured, mobile, or modular home is intended for temporary occupancy or for business purposes; (2) indoor or outdoor spaces associated with a school that students use commonly as part of their curriculum or extracurricular activities; (3) five thousand (5,000) or more square feet of building floor area in commercial facilities that are operating and normally occupied during working hours; and (4) an outdoor venue or recreation area, such as a playground, permanent sports field, amphitheater, or other similar place of outdoor public assembly.

JJ. "Operator" means the person or persons responsible for the overall operation of a stationary source.

KK. "Optical gas imaging (OGI)" means an imaging technology that utilizes a high-sensitivity infrared camera designed for and capable of detecting hydrocarbons.

LL. "Owner" means the person or persons who own a stationary source or part of a stationary source.

MM. "Permanent pit" means a pit used for collection, retention, or storage of produced water or brine and is installed for longer than one year.

NN. "Pneumatic controller" means an instrument that is actuated using pressurized gas and used to control or monitor process parameters such as liquid level, gas level, pressure, valve position, liquid flow, gas flow, and temperature.

OO. "Pneumatic diaphragm pump" means a positive displacement pump powered by pressurized natural gas that uses the reciprocating action of flexible diaphragms in conjunction with check valves to pump a fluid. A pump in which a fluid is displaced by a piston driven by a diaphragm is not considered a diaphragm pump. A lean glycol circulation pump that relies on energy exchange with the rich glycol from the contactor is not considered a diaphragm pump.

PP. "Potential to emit (PTE)" means the maximum capacity of a stationary source to emit an air contaminant under its physical and operational design. The physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and a restriction on the hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation is federally enforceable. The PTE for nitrogen dioxide shall be based on total oxides of nitrogen.

QQ. "Pre-production operations" means the drilling through the hydrocarbon bearing zones, hydraulic fracturing or refracturing, drill-out, and flowback of an oil and/or natural gas well.

RR. "Produced water" means a fluid that is an incidental byproduct from drilling for or the production of oil and gas.

SS. "Produced water management unit" means a recycling facility or a permanent pit that is a natural topographical depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), which is designed to accumulate produced water and has a design storage capacity equal to or greater than 50,000 barrels.

TT. "Qualified Professional Engineer" means an individual who is licensed by a state as a professional engineer to practice one or more disciplines of engineering and who is qualified by education, technical knowledge, and experience to make the specific technical certifications required under this Part.

UU. "Reciprocating compressor" means a piece of equipment that increases the pressure of process gas by positive displacement, employing linear movement of a piston rod.

VV. "Reconstruction" means a modification that results in the replacement of the components or addition of integrally related equipment to an existing source, to such an extent that the fixed capital cost of the new

components or equipment exceeds fifty percent of the fixed capital cost that would be required to construct a comparable entirely new facility.

WW. "Recycling facility" means a stationary or portable facility used exclusively for the treatment, re-use, or recycling of produced water and does not include oilfield equipment such as separators, heater treaters, and scrubbers in which produced water may be used.

XX. "Responsible official" means one of the following:

(1) for a corporation: president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of the corporation if the representative is responsible for the overall operation of the source.

(2) for a partnership or sole proprietorship: a general partner or the proprietor, respectively.

YY. **"Satellite facility"** means a liquid storage facility located downstream of primary separation but prior to sales.

ZZ. "Small business facility" means, for the purposes of this Part, a source that is independently owned or operated by a company that is a not a subsidiary or a division of another business, that employs no more than 10 employees at any time during the calendar year, and that has a gross annual revenue of less than $250,000. Employees include part-time, temporary, or limited service workers.

AAA. "Startup" means the setting into operation of air pollution control equipment or process equipment.

BBB. "Stationary Source" or **"source"** means any building, structure, equipment, facility, installation (including temporary installations), operation, process, or portable stationary source that emits or may emit any air contaminant. Portable stationary source means a source that can be relocated to another operating site with limited dismantling and reassembly.

CCC. "Storage vessel" means a single tank or other vessel that is designed to contain an accumulation of hydrocarbon liquid or produced water and is constructed primarily of non-earthen material including wood, concrete, steel, fiberglass, or plastic, which provide structural support, or a process vessel such as a surge control vessel, bottom receiver, or knockout vessel. A well completion vessel that receives recovered liquid from a well after commencement of operation for a period that exceeds 60 days is considered a storage vessel. A storage vessel does not include a vessel that is skid-mounted or permanently attached to a mobile source and located at the site for less than 180 consecutive days, such as a truck railcar, or a pressure vessel designed to operate in excess of 204.9 kilopascals without emissions to the atmosphere.

DDD. **"Temporarily abandoned wellhead site"** means an inactive wellhead site where the well's completion interval has been isolated. The completion interval is the reservoir interval that is open to the borehole and is isolated when tubing and artificial equipment has been removed and a bottom plug has been set.

EEE. **"Vessel measurement system"** means equipment and methods used to determine the quantity of the liquids inside a vessel (including a flowback vessel) without requiring direct access through the vessel thief hatch or other opening.

FFF. "Well workover" means the repair or stimulation of an existing production well for the purpose of restoring, prolonging, or enhancing the production of hydrocarbons.

GGG. "Wellhead site" means the equipment directly associated with one or more oil wells or natural gas wells upstream of the natural gas processing plant. A wellhead site may include equipment used for extraction, collection, routing, storage, separation, treating, dehydration, artificial lift, combustion, compression, pumping, metering, monitoring, and product piping.

[20.2.50.7 NMAC - N, XX/XX/2021]

20.2.50.8 SEVERABILITY: If any provision of this Part, or the application of this provision to any person or circumstance is held invalid, the remainder of this Part, or the application of this provision to any person or circumstance other than those as to which it is held invalid, shall not be affected thereby.

[20.2.50.8 NMAC - N, XX/XX/2021]

20.2.50.9 CONSTRUCTION: This Part shall be liberally construed to carry out its purpose.

[20.2.50.9 NMAC - N, XX/XX/2021]

20.2.50.10 SAVINGS CLAUSE: Repeal or supersession of prior versions of this Part shall not affect administrative or judicial action initiated under those prior versions.

[20.2.50.10 NMAC - N, XX/XX/2021]

20.2.50.11 COMPLIANCE WITH OTHER REGULATIONS: Compliance with this Part does not relieve a person from the responsibility to comply with other applicable federal, state, or local laws, rules or regulations, including more stringent controls.
[20.2.50.11 NMAC - N, XX/XX/2021]

20.2.50.12 DOCUMENTS: Documents incorporated and cited in this Part may be viewed at the New Mexico environment department, air quality bureau.
[20.2.50.12 NMAC - N, XX/XX/2021]
[The Air Quality Bureau is located at 525 Camino de los Marquez, Suite 1, Santa Fe, New Mexico 87505.]

20.2.23.13-20.2.23.110 [RESERVED]

20.2.50.111 APPLICABILITY:

A. This Part applies to crude oil and natural gas production and processing equipment and operations that extract, collect, separate, dehydrate, store, process, transport, transmit, or handle hydrocarbon liquid or produced water in the areas specified in 20.2.50.2 NMAC and are located at wellhead sites, tank batteries, gathering and boosting sites, natural gas processing plants, and transmission compressor stations, up to the point of the local distribution company custody transfer station.

B. In determining if any source is subject to this Part, including a small business facility as defined in this Part, the owner or operator shall calculate the Potential to Emit (PTE) of such source and shall have the PTE calculation certified by a qualified professional engineer or in-house engineer with expertise regarding the calculation of PTE. The calculation shall be kept on file for a minimum of five years and shall be provided to the department upon request.

C. An owner or operator of a small business facility as defined in this Part shall comply with the requirements of this Part as specified in 20.2.50.125 NMAC.

D. Oil refinery and transmission pipelines are not subject to this Part.
[20.2.50.111 NMAC - N, XX/XX/2021]

20.2.50.112 GENERAL PROVISIONS:

A. General requirements:

(1) Sources subject to emissions standards and requirements under this Part shall be operated and maintained consistent with manufacturer specifications, and good engineering and maintenance practices. The owner or operator shall keep manufacturer specifications and maintenance practices on file and make them available upon request by the department. For sources constructed prior to 1980 for which no manufacturer specifications and maintenance practices are available, the owner or operator shall develop and follow a maintenance schedule sufficient to operate and maintain such units in good working order. The owner or operator shall keep such maintenance schedules on file and make them available to the department upon request.

(2) Sources subject to emission standards or requirements under this Part shall be operated to minimize emissions of air contaminants, including VOC and NO_x.

(3) The owner or operator shall manage the source's record of data in a database that is able to generate a Compliance Database Report (CDR) adequate to provide the department with compliance assurance. The CDR is an electronic report generated by the owner or operator's database and submitted to the department upon request. The format of the CDR shall be determined by the department.

(4) The CDR is a report distinct from the owner or operator's database. The department does not require access to the owner or operator's database, only the CDR.

(5) If read by the owner or operator's authorized representative, the Equipment Monitoring Tags (EMT) for sources that utilize EMT shall access the owner or operator's database record for that source.

~~**(3)**~~**(6)** The owner or operator shall contemporaneously track each compliance event for each source subject to the requirements of this Part, and shall comply with the following:

(a) data gathered during each monitoring or testing event shall be contemporaneously uploaded into the database as soon as practicable, but no later than three business days of each compliance event.

(b) data required by this Part shall be maintained in the database for at least five years.

(7~~3~~) Within two years of the effective date of this Part, owners and operators of a source

utilizing an ~~requiring an Equipment Monitoring Tag (~~EMT~~)~~ system for compliance assurance shall physically tag each unit with an EMT, the format of which shall be either RFID, QR, or bar code such that, when scanned it provides a unique identifier of the source. This unique identifier shall act as an index to the source's record of the data required by this Part. The EMT shall be maintained by the owner or operator, and data in the EMT shall provide at a minimum, the following information:

(a) unique unit identification number;
(b) location of the source;
(c) type of source (e.g., tank, VRU, dehydrator, pneumatic controller, etc.);
(d) for each source, the VOC (and NO_x, if applicable) PTE in lbs./hr. and tpy;
(e) for a control device, the controlled VOC and NO_x PTE in lbs./hr. and tpy;
(f) make, model, and serial number; and
(g) a link to the manufacturer's maintenance schedule or repair recommendations.

(84) The EMT shall be installed and maintained by the owner or operator of the facility.

(95) The EMT shall be of a format scannable by an owner or operator's authorized representatives and, upon scanning, shall provide unique identifier that shall index the source's record of the data required by this Part.

~~**(6)** The owner or operator shall manage the source's record of data in a database that is able to generate a Compliance Database Report (CDR). The CDR is an electronic report generated by the owner or operator's database and submitted to the department upon request. The format of the CDR shall be determined by the department.~~

~~**(7)** The CDR is a report distinct from the owner or operator's database. The department does not require access to the owner or operator's database, only the CDR.~~

~~**(8)** If read by the owner or operator's authorized representative, the EMT shall access the owner or operator's database record for that source.~~

~~**(9)** The owner or operator shall contemporaneously track each compliance event for each source subject to the EMT requirements of this Part, and shall comply with the following:~~

~~**(a)** data gathered during each monitoring or testing event shall be contemporaneously uploaded into the database as soon as practicable, but no later than three business days of each compliance event.~~

~~**(b)** data required by this Part shall be maintained in the database for at least five years.~~

(10) The department may request that an owner or operator retain a third party at their own expense to verify any data or information collected, reported, or recorded pursuant to this Part, and make recommendations to correct or improve the collection of data or information. The owner or operator shall submit a report of the verification and any recommendations made by the third party to the department by a date specified and implement the recommendations in the manner approved by the department.

B. Monitoring requirements:

(1) Sources subject to emission standards and monitoring (e.g. inspection, testing, parametric monitoring) requirements under this Part shall be inspected monthly to ensure proper maintenance and operation, unless a different schedule is specified in the Section applicable to that source type. If the equipment is shut down at the time of required periodic testing, monitoring, or inspection, the owner or operator shall not be required to restart the unit for the sole purpose of performing the testing, monitoring, or inspection, but shall note the shut down in the records kept for that equipment for that monitoring event.

(2) An owner or operator may submit for the department's review and approval an equally effective, enforceable, and equivalent alternative monitoring strategy. Such requests shall be made on an application form provided by the department. The department shall issue a letter approving or denying the requested alternative monitoring strategy. An owner or operator shall comply with the default monitoring requirements required under the applicable Section and shall not operate under an alternative monitoring strategy until it has been approved by the department.

(a) For sources that implement alternative monitoring strategies, initial scanning of the EMT before a monitoring event and final scanning of an EMT at the end of the monitoring event are not required provided that electronic data retrieved from the monitoring event satisfies the requirements found at 20.2.50.112(B)(3)(a)-(e) NMAC and is uploaded to the owner or operator's database following the monitoring event.

(3) ~~Each~~ For sources that utilize an EMT, each monitoring event (e.g. testing, inspection, parametric monitoring) shall be initiated by an initial scanning of the EMT, the results of which shall then be

directly uploaded into the database or temporarily into the handheld or other device. Upon completion of the monitoring event, a final scanning of the EMT shall terminate the monitoring event. At a minimum, the uploaded data shall include:

(a) date and time of the testing, monitoring, or inspection event;
(b) name of the personnel conducting the testing, monitoring, or inspection;
(c) identification number and type of unit;
(d) a description of any maintenance or repair activity conducted; and
(e) results of testing, monitoring, or inspection as required under this Part.

C. Recordkeeping requirements:

(1) Within three business days of a monitoring event, an electronic record shall be made of the monitoring event and shall include the following data:

(a) date and time of the testing, monitoring, or inspection event;
(b) name of the personnel conducting the testing, monitoring, or inspection;
(c) identification number and type of unit;
(d) a description of any maintenance or repair activity conducted; and
(e) results of any testing, monitoring, or inspections required under this Part.

(2) The owner or operator shall keep an electronic record required by this Part for five years. The department may treat loss of data or failure to maintain a record, including failure to transfer a record upon sale or transfer of ownership or operating authority, as a failure to collect the data.

~~**(3)** Before the transfer of ownership of equipment subject to this Part, the current owner or operator shall conduct and document a full compliance evaluation of such equipment. The documentation shall include a certification by a responsible official as to whether the equipment is in compliance with the requirements of this Part. The compliance determination shall be conducted no earlier than three months before the transfer of ownership. The owner or operator shall keep the full compliance evaluation and certification by the responsible official for for five years.~~

D. Reporting requirements: Within 24 hours of a request by the department, the owner or operator shall for each unit subject to the request, provide the requested information either by electronically submitting a CDR to the department's Secure Extranet Portal (SEP), or by other means and formats specified by the department in its request.

[20.2.50.112 NMAC - N, XX/XX/2021]

20.2.50.113 ENGINES AND TURBINES:

A. Applicability: Portable and stationary natural gas-fired spark ignition engines, compression ignition engines, and natural gas-fired combustion turbines located at wellhead sites, tank batteries, gathering and boosting sites, natural gas processing plants, and transmission compressor stations, with a rated horsepower greater than the horsepower ratings of Table 1, 2, and 3 of 20.2.50.113 NMAC are subject to the requirements of 20.2.50.113 NMAC.

B. Emission standards:

(1) The owner or operator of a portable or stationary natural gas-fired spark-ignition engine, compression ignition engine, or natural gas-fired combustion turbine shall ensure compliance with the emission standards by the dates specified in Subsection B of 20.2.50.113 NMAC.

(2) The owner or operator of an existing natural gas-fired spark-ignition engine shall complete an inventory of all existing engines by January 1, 2023, and shall prepare a schedule to ensure that each existing engine does not exceed the emission standards in table 1 of Paragraph (2) of Subsection B of 20.2.50.113 NMAC as follows:

(a) by January 1, 2025, the owner or operator shall ensure at least thirty percent of the company's existing engines meet the emission standards.
(b) by January 1, 2027, the owner or operator shall ensure at least an additional thirty-five percent of the company's existing engines meets the emission standards.
(c) by January 1, 2029, the owner or operator shall ensure that the remaining thirty-five percent of the company's existing engines meets the emission standards.
(d) in lieu of meeting the emission standards for an existing natural gas-fired spark ignition engine, an owner or operator may reduce the annual hours of operation of an engine such that the annual NOx and VOC emissions are reduced by at least ninety-five percent per year.

Table 1 - EMISSION STANDARDS FOR NATURAL GAS-FIRED SPARK-IGNITION ENGINES

CONSTRUCTED, RECONSTRUCTED, OR INSTALLED BEFORE THE EFFECTIVE DATE OF 20.2.50 NMAC.

Engine Type	Rated bhp	NO_x	CO	NMNEHC (as propane)
Lean-burn	>1,000	0.50 g/bhp-hr	47 ppmvd @ 15% O_2 or 93% reduction	0.70 g/bhp-hr
Rich-burn	>1,000	0.50 g/bhp-hr	0.60 g/bhp-hr	0.70 g/bhp-hr

(3) The owner or operator of a new natural gas-fired spark ignition engine shall ensure the engine does not exceed the emission standards in table 2 of Paragraph (3) of Subsection B of 20.2.50.113 NMAC upon startup.

Table 2 - EMISSION STANDARDS FOR NATURAL GAS-FIRED SPARK-IGNITION ENGINES CONSTRUCTED, RECONSTRUCTED, OR INSTALLED AFTER THE EFFECTIVE DATE OF 20.2.50 NMAC.

Engine Type	Rated bhp	NO_x	CO	NMNEHC (as propane)
Lean-burn	>500 - <1,000	0.50 g/bhp-hr	0.60 g/bhp-hr	0.70 g/bhp-hr
Lean-burn	≥1,000	0.30 g/bhp-hr uncontrolled or 0.05 g/bhp-hr with control	0.60 g/bhp-hr	0.70 g/bhp-hr
Rich-burn	>500	0.50 g/bhp-hr	0.60 g/bhp-hr	0.70 g/bhp-hr

(4) The owner or operator of a natural gas-fired spark ignition engine with NO_x emission control technology that uses ammonia or urea as a reagent shall ensure that the exhaust ammonia slip is limited to 10 ppmvd or less, corrected to fifteen percent oxygen.

(5) The owner or operator of a compression ignition engine shall ensure compliance with the following emission standards:

(a) a new portable or stationary compression ignition engine with a maximum design power output equal to or greater than 500 horsepower that is not subject to the emission standards under Subparagraph (b) of Paragraph (5) of Subsection B of 20.2.50.113 NMAC shall limit NO_x emissions to not more than nine g/bhp-hr upon startup.

(b) a stationary compression ignition engine that is subject to and complying with Subpart IIII of 40 CFR Part 60, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, is not subject to the requirements of Subparagraph (a) of Paragraph (5) of Subsection B of 20.2.50.113 NMAC.

(6) The owner or operator of a portable or stationary compression ignition engine with NO_x emission control technology that uses ammonia or urea as a reagent shall ensure that the exhaust ammonia slip is limited to 10 ppmvd or less, corrected to fifteen percent oxygen.

(7) The owner or operator of a stationary natural gas-fired combustion turbine with a maximum design rating equal to or greater than 1,000 bhp shall comply with the applicable emission standards for an existing, new, or reconstructed turbine listed in table 3 of Paragraph (7) of Subsection B of 20.2.50.113 NMAC.

Table 3 - EMISSION STANDARDS FOR STATIONARY COMBUSTION TURBINES

For each natural gas-fired combustion turbine constructed or reconstructed and installed before the effective date of 20.2.50 NMAC, the owner or operator shall ensure the turbine does not exceed the following emission standards no later than two years from the effective date of this Part:			
Turbine Rating (bhp)	NO_x (ppmvd @15% O_2)	CO (ppmvd @ 15% O_2)	NMNEHC (as propane, ppmvd @15% O_2)
≥1,000 and <5,000	50	50	9
≥5,000 and <15,000	50	50	9
≥15,000	50	50 or 93% reduction	5 or 50% reduction

For each natural gas-fired combustion turbine constructed or reconstructed and installed on or after the effective date of 20.2.50 NMAC, the owner or operator shall ensure the turbine does not exceed the following emission standards upon startup:			
Turbine Rating (bhp)	NO_x (ppmvd @15% O_2)	CO (ppmvd @ 15% O_2)	NMNEHC (as propane, ppmvd @15% O_2)
≥1,000 and <5,000	25	25	9
≥5,000 and <15,900	15	10	9
≥15,900	9.0 Uncontrolled or 2.0 with Control	10 Uncontrolled or 1.8 with Control	5

(8) The owner or operator of a stationary natural gas-fired combustion turbine with NO_x emission control technology that uses ammonia or urea as a reagent shall ensure that the exhaust ammonia slip is limited to 10 ppmvd or less, corrected to fifteen percent oxygen.

(9) The owner or operator of an engine or turbine shall install an EMT on the engine or turbine in accordance with 20.2.50.112 NMAC.

(10) The owner or operator of an emergency use engine that is operated less than 100 hours per year is not subject to the emissions standards in this Part but shall be equipped with a non-resettable hour meter to monitor and record any hours of operation.

C. Monitoring requirements:

(1) Maintenance and repair for a spark-ignition engine, compression-ignition engine, and stationary combustion turbine shall meet the minimum manufacturer recommended maintenance schedule. The following maintenance, adjustment, replacement, or repair events for engines and turbines shall be documented as they occur:

(a) routine maintenance that takes a unit out of service for more than two hours during any 24-hour period; and

(b) unscheduled repairs that require a unit to be taken out of service for more than two hours during any 24-hour period.

(2) Catalytic converters (oxidative, selective and non-selective) and AFR controllers shall be maintained according to manufacturer or supplier recommended maintenance schedules, including replacement of oxygen sensors as necessary for oxygen-based controllers. During periods of catalytic converter or AFR controller maintenance, the owner or operator shall shut down the engine or turbine until the catalytic converter or AFR controller can be replaced with a functionally equivalent spare to allow the engine or turbine to return to operation.

(3) For equipment operated for 500 hours per year or more, compliance with the emission standards in Subsection B of 20.2.50.113 NMAC shall be demonstrated by performing an initial emissions test, followed by annual tests, for NO_x, CO, and non-methane non-ethane hydrocarbons (NMNEHC) using a portable analyzer or U.S. EPA reference method. For units with g/hp-hr emission standards, the engine load shall be calculated using the following equations:

$$\text{Load (Hp)} = \frac{\text{Fuel consumption (scf/hr) x Measured fuel heating value (LHV btu/scf)}}{\text{Manufacturer's rated BSFC (btu/bhp-hr) at 100\% load or best efficiency}}$$

$$\text{Load (Hp)} = \frac{\text{Fuel consumption (gal/hr) x Measured fuel heating value (LHV btu/gal)}}{\text{Manufacturer's rated BSFC (btu/bhp-hr) at 100\% load or best efficiency}}$$

Where: LVH = lower heating value, btu/scf, or btu/gal, as appropriate; and
BSFC = brake specific fuel consumption

(a) emissions testing events shall be conducted at ninety percent or greater of the unit's capacity. If the ninety percent capacity cannot be achieved, the monitoring and testing shall be conducted at the maximum achievable capacity or load under prevailing operating conditions. The load and the parameters used to calculate it shall be recorded to document operating conditions at the time of testing and shall be included with the test report.

(b) emissions testing utilizing a portable analyzer shall be conducted in accordance with the requirements of the current version of ASTM D 6522. If a portable analyzer has met a previously approved department criterion, the analyzer may be operated in accordance with that criterion until it is replaced.

(c) the default time period for a test run shall be at least 20 minutes.

(d) an emissions test shall consist of three separate runs, with the arithmetic mean of the results from the three runs used to determine compliance with the applicable emission standard.

(e) during emissions tests, pollutant and diluent concentration shall be monitored and recorded. Fuel flow rate shall be monitored and recorded if stack gas flow rate is determined utilizing U.S. EPA reference method 19. This information shall be included with the periodic test report.

(f) stack gas flow rate shall be calculated in accordance with U.S. EPA reference method 19 utilizing fuel flow rate (scf) determined by a dedicated fuel flow meter and fuel heating value (Btu/scf). The owner or operator shall provide a contemporaneous fuel gas analysis (preferably on the day of the test, but no earlier than three months before the test date) and a recent fuel flow meter calibration certificate (within the most recent quarter) with the final test report. Alternatively, stack gas flow rate may be determined by using U.S. EPA reference methods 1 through 4 or through the use of manufacturer provided fuel consumption rates.

(g) upon request by the department, an owner or operator shall submit a notification and protocol for an initial or annual emissions test.

(h) emissions testing shall be conducted at least once per calendar year. Emission testing required by Subparts GG, IIII, JJJJ, or KKKK of 40 CFR 60, or Subpart ZZZZ of 40 CFR 63, may be used to satisfy the emissions testing requirements if it meets the requirements of 20.2.50.113 NMAC and is completed at least once per calendar year.

(4) The owner or operator of equipment operated less than 500 hours per year shall monitor the hours of operation using a non-resettable hour meter and shall test the unit at least once per 8760 hours of operation in accordance with the emissions testing requirements in Paragraph (3) of Subsection C of 20.2.50.113 NMAC.

(5) An owner or operator of an emergency use engine operated for less than 100 hours per year shall monitor the hours of operation by a non-resettable hour meter.

(6) An owner or operator limiting the annual operating hours of an engine to meet the requirements of Paragraph (2) of Subsection B of 20.2.50.113 NMAC shall monitor the hours of operation by a non-resettable hour meter.

(7) Prior to monitoring, testing, inspection, or maintenance of an engine or turbine, the owner or operator shall scan the EMT, and the monitoring data entry shall be made in accordance with the requirements of 20.2.50.112 NMAC.

D. Recordkeeping requirements:

(1) The owner or operator of a spark ignition engine, compression ignition engine, or stationary combustion turbine shall maintain a record in accordance with 20.2.50.112 NMAC for the engine or turbine. The record shall include:

(a) the make, model, serial number, and EMT for the engine or turbine;

(b) a copy of the engine, turbine, or control device manufacturer recommended maintenance and repair schedule;

(c) all inspection, maintenance, or repair activity on the engine, turbine, and control device, including:

(i) the date and time of an inspection, maintenance or repair;

(ii) the date a subsequent analysis was performed (if applicable);

(iii) the name of the personnel conducting the inspection, maintenance or repair;

(iv) a description of the physical condition of the equipment as found during the inspection;

(v) a description of maintenance or repair activity conducted; and

(vi) the results of the inspection and any required corrective actions.

(2) The owner or operator of a spark ignition engine, compression ignition engine, or stationary combustion turbine shall maintain records of initial and annual emissions testing for the engine or turbine. The records shall include:

(a) the make, model, serial number, and EMT for the tested engine or turbine;

(b) the date and time of sampling or measurements;

(c) the date analyses were performed;

(d) the name of the personnel and the qualified entity that performed the analyses;

(e) the analytical or test methods used;

(f) the results of analyses or tests;

(g) for equipment operated less than 500 hours per year, the total annual hours of operation as recorded by the non-resettable hour meter; and

(h) operating conditions at the time of sampling or measurement.

(3) The owner or operator of an emergency use engine operated less than 100 hours per year shall record the total annual hours of operation as recorded by the non-resettable hour meter.

(4) The owner or operator limiting the annual operating hours of an engine to meet the requirements of Paragraph (2) of Subsection B of 20.2.50.113 NMAC shall record the hours of operation by a non-resettable hour meter. The owner or operator shall calculate and record the annual NOx and VOC emission calculation, based on the engine's actual hours of operation, to demonstrate the ninety-five percent emission reduction requirement is met.

E. Reporting requirements: The owner or operator shall comply with the reporting requirements in 20.2.50.112 NMAC.

[20.2.50.113 NM–C - N, XX/XX/2021]

20.2.50.114 COMPRESSOR SEALS:

A. Applicability:

(1) Centrifugal compressors using wet seals and located at tank batteries, gathering and boosting sites, natural gas processing plants, or transmission compressor stations are subject to the requirements of 20.2.50.114 NMAC. Centrifugal compressors located at wellhead sites are not subject to the requirements of 20.2.50.114 NMAC.

(2) Reciprocating compressors located at tank batteries, gathering and boosting sites, natural gas processing plants, or transmission compressor stations are subject to the requirements of 20.2.50.114 NMAC. Reciprocating compressors located at wellhead sites are not subject to the requirements of 20.2.50.114 NMAC.

B. Emission standards:

(1) The owner or operator of an existing centrifugal compressor shall control VOC emissions from a centrifugal compressor wet seal fluid degassing system by at least ninety-five percent within two years of the effective date of this Part. Emissions shall be captured and routed via a closed vent system to a control device, recovery system, fuel cell, or a process stream.

(2) The owner or operator of an existing reciprocating compressor shall, either:

(a) replace the reciprocating compressor rod packing after every 26,000 hours of compressor operation or every 36 months, whichever is reached later. The owner or operator shall begin counting the hours of compressor operation toward the first replacement of the rod packing upon the effective date of this Part; or

(b) beginning no later than two years from the effective date of this Part, collect emissions from the rod packing under negative pressure and route them via a closed vent system to a control device, recovery system, fuel cell, or a process stream.

(3) The owner or operator of a new centrifugal compressor shall control VOC emissions from the centrifugal compressor wet seal fluid degassing system by at least ninety-eight percent upon startup. Emissions shall be captured and routed via a closed vent system to a control device, recovery system, fuel cell, or process stream.

(4) The owner or operator of a new reciprocating compressor shall, upon startup, either:

(a) replace the reciprocating compressor rod packing after every 26,000 hours of compressor operation, or every 36 months, whichever is reached later; or

(b) collect emissions from the rod packing under negative pressure and route them via a closed vent system to a control device, a recovery system, fuel cell or a process stream.

(5) The owner or operator of a centrifugal or reciprocating compressor shall install an EMT on the compressor in accordance with 20.2.50.112 NMAC.

(6) The owner or operator complying with the emission standards in Subsection B of 20.2.50.114 NMAC through use of a control device shall comply with the control device requirements in 20.2.50.115 NMAC.

C. Monitoring requirements:

(1) The owner or operator of a centrifugal compressor complying with Paragraph (1) or (3) of Subsection B of 20.2.50.114 NMAC shall maintain a closed vent system encompassing the wet seal fluid degassing system that complies with the monitoring requirements in 20.2.50.115 NMAC.

(2) The owner or operator of a reciprocating compressor complying with Subparagraph (a) of Paragraph (2) or Subparagraph (a) of Paragraph (4) of Subsection B of 20.2.50.114 NMAC shall continuously

monitor the hours of operation with a non-resettable hour meter and track the number of hours since initial startup or since the previous reciprocating compressor rod packing replacement.

(3) The owner or operator of a reciprocating compressor complying with Subparagraph (b) of Paragraph (2) or Subparagraph (b) of Paragraph (4) of Subsection B of 20.2.50.114 NMAC shall monitor the rod packing emissions collection system semiannually to ensure that it operates under negative pressure and routes emissions through a closed vent system to a control device, recovery system, fuel cell, or process stream.

(4) The owner or operator of a centrifugal or reciprocating compressor complying with the requirements in Subsection B of 20.2.50.114 NMAC through use of a closed vent system or control device shall comply with the monitoring requirements in 20.2.50.115 NMAC.

(5) The owner or operator of a centrifugal or reciprocating compressor shall comply with the monitoring requirements in 20.2.50.112 NMAC.

D. Recordkeeping requirements:

(1) The owner or operator of a centrifugal compressor using a wet seal fluid degassing system shall maintain a record of the following:

(a) the location of the centrifugal compressor;

(b) the date of construction, reconstruction, or modification of the centrifugal compressor;

(c) the monitoring required in Subsection C of 20.2.50.114 NMAC, including the time and date of the monitoring, the personnel conducting the monitoring, a description of any problem observed during the monitoring, and a description of any corrective action taken; and

(d) the type, make, model, and identification number of a control device used to comply with the control requirements in Subsection B of 20.2.50.114 NMAC.

(2) The owner or operator of a reciprocating compressor shall maintain a record of the following:

(a) the location of the reciprocating compressor;

(b) the date of construction, reconstruction, or modification of the reciprocating compressor; and

(c) the monitoring required in Subsection C of 20.2.50.114 NMAC, including:

(i) the number of hours of operation since initial startup or the last rod packing replacement;

(ii) the records of pressure in the rod packing emissions collection system; and

(iii) the time and date of the inspection, the personnel conducting the inspection, a notation of which checks required in Subsection C of 20.2.50.114 NMAC were completed, a description of problems observed during the inspection, and a description and date of corrective actions taken.

(3) The owner or operator of a centrifugal or reciprocating compressor complying with the requirements in Subsection B of 20.2.50.114 NMAC through use of a control device or closed vent system shall comply with the recordkeeping requirements in 20.2.50.115 NMAC.

(4) The owner or operator of a centrifugal or reciprocating compressor shall comply with the recordkeeping requirements in 20.2.50.112 NMAC.

E. Reporting requirements: The owner or operator of a centrifugal or reciprocating compressor shall comply with the reporting requirements in 20.2.50.112 NMAC.

[20.2.50.114 NM–C - N, XX/XX/2021]

20.2.50.115 CONTROL DEVICES:

A. Applicability: These requirements apply to control devices as defined in 20.2.50.7 NMAC and used to comply with the emission standards and emission reduction requirements in this Part.

B. General requirements:

(1) Control devices used to demonstrate compliance with this Part shall be installed, operated, and maintained consistent with manufacturer specifications, and good engineering and maintenance practices.

(2) Control devices shall be adequately designed and sized to achieve the control efficiency rates required by this Part and to handle fluctuations in emissions of VOC or NO_x.

(3) The owner or operator of a control device used to comply with the emission standards in this Part shall install an EMT on the control device in accordance with 20.2.50.112 NMAC.

(4) The owner or operator shall inspect control devices used to comply with this Part at least

monthly to ensure proper maintenance and operation. Prior to an inspection or monitoring event, the owner or operator shall scan the EMT and the required monitoring data shall be electronically captured in accordance with this Part.

(5) The owner or operator shall ensure that a control device used to comply with emission standards in this Part operates as a closed vent system that captures and routes VOC emissions to the control device, and that unburnt gas is not directly vented to the atmosphere.

(6) The owner or operator of a closed vent system for a centrifugal compressor wet seal fluid degassing system, reciprocating compressor, pneumatic controller or pump, ~~or~~ storage vessel, or flowback vessel using a control device or routing emissions to a process shall:

(a) ensure the control device or process is of sufficient design and capacity to accommodate all emissions from the affected sources;

(b) conduct an assessment to confirm that the closed vent system is of sufficient design and capacity to ensure that all emissions from the affected equipment are routed to the control device or process; and

(c) have the closed vent system certified by a qualified professional engineer or an in-house engineer with expertise regarding the design and operation of the closed vent system in accordance with Paragraphs (c)(i) and (ii) of this Section.

(i) The assessment of the closed vent system shall be prepared under the direction or supervision of a qualified professional engineer or an in-house engineer who signs the certification in Paragraph (c)(ii) of this Section.

(ii) the owner or operator shall provide the following certification, signed and dated by a qualified professional engineer or an in-house engineer: "I certify that the closed vent system design and capacity assessment was prepared under my direction or supervision. I further certify that the closed vent system design and capacity assessment was conducted, and this report was prepared pursuant to the requirements of this Part. Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete."

(7) The owner or operator shall keep manufacturer specifications for all control devices on file. The information shall include:

(a) manufacturer name, make, and model;

(b) maximum heating value for an open flare, ECD, or TO;

(c) maximum rated capacity for an open flare, ECD/TO, or VRU;

(d) gas flow range for an open flare, ECD, or TO; and

(e) designed destruction or vapor recovery efficiency.

C. Requirements for open flares:

(1) Emission standards:

(a) the flare shall combust the gas sent to the flare and combustion shall be maintained for the duration of time that gas is sent to the flare. The owner or operator shall not send gas to the flare in excess of the manufacturer maximum rated capacity.

(b) the owner or operator shall equip each new and existing flare (except those flares required to meet the requirements of Paragraph (C) of this Subsection) with a continuous pilot flame, an operational auto-igniter, or require manual ignition, and shall comply with the following:

(i) a flare with a continuous pilot flame or an auto-igniter shall be equipped with a system to ensure the flare is operated with a flame present at all times when gas is being sent to the flare.

(ii) the owner or operator of a flare with manual ignition shall inspect and ensure a flame is present upon initiating a flaring event.

(iii) a new flare controlling a continuous gas stream shall be equipped with a continuous pilot flame upon startup.

(iv) an existing flare controlling a continuous gas stream constructed before the effective date of this Part shall be equipped with a continuous pilot no later than one year after the effective date of this Part.

(c) an existing flare located at a site with an annual average daily production of equal to or less than 10 barrels of oil per day or an average daily production of 60,000 standard cubic feet of natural gas shall be equipped with an auto-ignitor, continuous pilot, or technology (e.g. alarm) that alerts the owner or operator of a flare malfunction, if replaced or reconstructed after the effective date of this Part.

(d) the owner or operator shall operate a flare with no visible emissions, except for

periods not to exceed a total of 30 seconds during any 15 consecutive minutes. The flare shall be designed so that an observer can, by means of visual observation from the outside of the flare or by other means such as a continuous monitoring device, determine whether it is operating properly.

(e) the owner or operator shall repair the flare within three business days of any alarm activation.

(2) Monitoring requirements:

(a) the owner or operator of a flare with a continuous pilot or auto igniter shall continuously monitor the presence of a pilot flame, or presence of flame during flaring if using an auto igniter, using a thermocouple equipped with a continuous recorder and alarm to detect the presence of a flame. An alternative equivalent technology alerting the owner or operator of failure of ignition of the gas stream may be used in lieu of a continuous recorder and alarm, if approved by the department;

(b) the owner or operator of a manually ignited flare shall monitor the presence of a flame using continuous visual observation during a flaring event;

(c) the owner or operator shall, at least quarterly, and upon observing visible emissions, perform a U.S. EPA method 22 observation while the flare pilot or auto igniter flame is present to certify compliance with visible emission requirements. The observation period shall be a minimum of 15 consecutive minutes;

(d) prior to an inspection or monitoring event, the EMT on the flare shall be scanned and the required monitoring data shall be electronically captured during the event in accordance with the monitoring requirements of 20.2.50.112 NMAC; and

(e) the owner or operator shall monitor the technology that alerts the owner or operator of a flare malfunction and any instances of technology or alarm activation.

(3) Recordkeeping requirements: The owner or operator of an open flare shall keep a record of the following:

(a) any instance of alarm activation, including the date and cause of alarm activation, action taken to bring the flare into a normal operating condition, the name of the personnel conducting the inspection, and any maintenance activity performed;

(b) the results of the U.S. EPA method 22 observations;

(c) the monitoring of the presence of a flame on a manual flare during a flaring event as required under Subparagraph (b) of Paragraph (2) of Subsection C of 20.2.50.115 NMAC;

(d) the results of the gas analysis for the gas being flared, including VOC content and heating value; and

(e) any instance of technology or alarm activation of a malfunctioning flare, including the date and cause of the activation, the action taken to bring the flare into normal operating condition, date of repair, name of the personnel conducting the inspection, and any maintenance activities performed.

(4) Reporting requirements: The owner or operator shall comply with the reporting requirements in 20.2.50.112 NMAC.

D. Requirements for enclosed combustion devices (ECD) and thermal oxidizers (TO):

(1) Emission standards:

(a) the ECD/TO shall combust the gas sent to the ECD/TO. The owner or operator shall not send gas to the ECD/TO in excess of the manufacturer maximum rated capacity.

(b) the owner or operator shall equip an ECD/TO with a continuous pilot flame or an auto-igniter. Existing ECD/TO shall be equipped with a continuous pilot flame or an auto-igniter no later than one year after the effective date. New ECD/TO shall be equipped with a continuous pilot flame or an auto-igniter upon startup.

(c) ECD/TO with a continuous pilot flame or an auto-igniter shall be equipped with a system to ensure that the ECD/TO is operated with a flame present at all times when gas is sent to the ECD/TO. Combustion shall be maintained for the duration of time that gas is sent to the ECD/TO.

(d) the owner or operator shall operate an ECD/TO with no visible emissions, except for periods not to exceed a total of 30 seconds during any 15 consecutive minutes. The ECD/TO shall be designed so that an observer can, by means of visual observation from the outside of the ECD/TO or by other means such as a continuous monitoring device, determine whether it is operating properly.

(2) Monitoring requirements:

(a) the owner or operator of an ECD/TO with a continuous pilot or an auto igniter shall continuously monitor the presence of a pilot flame, or of a flame during combustion if using an auto-igniter, using a thermocouple equipped with a continuous recorder and alarm to detect the presence of a flame. An

alternative equivalent technology alerting the owner or operator of failure of ignition of the gas stream may be used in lieu of a continuous recorder and alarm, if approved by the department.

(b) the owner or operator shall, at least quarterly, and upon observing visible emissions, perform a U.S. EPA method 22 observation while the ECD/TO pilot flame or auto igniter flame is present to certify compliance with the visible emission requirements. The period of observation shall be a minimum of 15 consecutive minutes.

(c) prior to an inspection or monitoring event, the EMT on the unit shall be scanned and the required monitoring data shall be electronically captured during the monitoring event in accordance with the monitoring requirements of 20.2.50.112 NMAC.

(3) Recordkeeping requirements: The owner or operator of an ECD/TO shall keep records of the following:

(a) any instance of an alarm activation, including the date and cause of the activation, any action taken to bring the ECD/TO into normal operating condition, the name of the personnel conducting the inspection, and any maintenance activities performed;

(b) the result of the U.S. EPA method 22 observation; and

(c) the results of gas analysis for the gas being combusted, including VOC content and heating value.

(4) Reporting requirements: The owner or operator shall comply with the reporting requirements in 20.2.50.112 NMAC.

E. Requirements for vapor recover units (VRU):

(1) Emission standards:

(a) the owner or operator shall operate the VRU as a closed vent system that captures and routes all VOC emissions directly back to the process or to a sales pipeline and does not vent to the atmosphere.

(b) the owner or operator shall control VOC emissions during startup, shutdown, maintenance, or other VRU downtime with a backup control device (e.g. flare, ECD, TO) or redundant VRU.

(2) Monitoring Requirements:

(a) the owner or operator shall comply with the standards for equipment leaks in 20.2.50.116 NMAC, or, alternatively, shall implement a program that meets the requirements of Subpart OOOOa of 40 CFR 60.

(b) prior to a VRU inspection or monitoring event, the EMT on the unit shall be scanned and the required monitoring data shall be electronically captured during the monitoring event in accordance with the monitoring requirements of 20.2.50.112 NMAC.

(3) Recordkeeping requirements: For a VRU inspection or monitoring event, the owner or operator shall record the result of the event in accordance with 20.2.50.112 NMAC, including the name of the personnel conducting the inspection, and any maintenance or repair activities required. The owner or operator shall record the type of redundant control device used during VRU downtime.

(4) Reporting requirements: The owner or operator shall comply with the reporting requirements in 20.2.50.112 NMAC.

F. Recordkeeping requirements: The owner or operator of a control device shall maintain a record of the following:

(1) the certification of the closed vent system as required by this Part; and

(2) the information required in Paragraph (7) of Subsection B of 20.2.50.115 NMAC.

G. Reporting requirements: The owner or operator shall comply with the reporting requirements in 20.2.50.112 NMAC.

~~**H. Requirements for flowback vessels and preproduction operations:**~~

~~**(1)** Emissions standards:~~

~~**(a)** the owner or operator of a well that begins flowback on or after [effective date of this Part] must collect and control emissions from each flowback vessel on and after the date flowback is routed to the flowback vessel by routing emissions to an operating control device that achieves a hydrocarbon control efficiency of at least 95 percent. If a TO or ECD is used, it must have a design destruction efficiency of at least 98 percent for hydrocarbons.~~

~~**(i)** the owner or operator shall use enclosed, vapor-tight flowback vessels with an appropriate pressure relief system to be used only as necessary to ensure safety.~~

~~**(ii)** flowback vessels must be inspected, tested, and refurbished where necessary to ensure the flowback vessel is vapor-tight prior to receiving flowback~~

~~**(iii)** the owner or operator shall use a tank measurement system to determine the quantity of liquids in the flowback vessel(s).~~

~~**(A)** Thief hatches or other access points to the flowback vessel must remain closed and latched during activities to determine the quantity of liquids in the flowback vessel(s).~~

~~**(B)** Opening the thief hatch or other access point if required to inspect, test, or calibrate the tank measurement system or to add biocides or chemicals is not a violation of Section 115.H(1)(iv)(i).~~

~~**(2)** Monitoring~~

~~**(a)** Owners and or operators of a well with flowback that begins on or after the effective date of 20.2.50 NMAC, must conduct daily visual inspections of the flowback vessel and any associated equipment, including~~

~~**(i)** visual inspection of any thief hatch, pressure relief valve, or other access point to ensure that they are closed and properly seated.~~

~~**(ii)** visual inspection or monitoring of the control device to ensure that it is operating.~~

~~**(iii)** visual inspection of the control device to ensure that the valves for the piping from the flowback vessel to the control device are open.~~

~~**(3)** Recordkeeping~~

~~**(a)** The owner or operator of each flowback vessel subject to Section 115.H(1). must maintain records for a period of five (5) years and make them available to the NMED upon request, including~~

~~**(i)** the API number of the well and the associated facility location, including latitude and longitude coordinates.~~

~~**(ii)** the date and time of the onset of flowback.~~

~~**(iii)** the date and time the flowback vessels were permanently disconnected, if applicable.~~

~~**(iv)** the date and duration of any period where the control device is not operating.~~

~~**(v)** records of the inspections required in Section 115.H(2), including the time and date of each inspection, a description of any problems observed, a description and date of any corrective action(s) taken, and the name of the employee or third party performing corrective action(s).~~

[20.2.50.115 NM~~–~~C - N, XX/XX/2021]

20.2.50.116 EQUIPMENT LEAKS AND FUGITIVE EMISSIONS:

A. Applicability: Wellhead sites, tank batteries, gathering and boosting sites, gas processing plants, transmission compressor stations, and associated piping and components are subject to the requirements of 20.2.50.116 NMAC.

B. Emission standards: The owner or operator of oil and gas production and processing equipment located at wellhead sites, tank batteries, gathering and boosting sites, gas processing plants, or transmission compressor stations shall demonstrate compliance with this Part by performing the monitoring, recordkeeping, and reporting requirements specified in 20.2.50.116 NMAC.

C. Default Monitoring requirements: Owners and operators shall comply with the following monitoring requirements and the monitoring requirements in 20.2.50.112 NMAC:

(1) The owner or operator of a facility with an annual average daily production of greater than 10 barrels of oil per day or an average daily production of greater than 60,000 standard cubic feet per day of natural gas shall, at least weekly, conduct audio, visual, and olfactory (AVO) inspections of thief hatches, closed vent systems, pumps, compressors, pressure relief devices, open-ended valves or lines, valves, flanges, connectors, piping, and associated equipment to identify defects and leaking components as follows:

(a) conduct a visual inspection for: cracks, holes, or gaps in piping or covers; loose connections; liquid leaks; broken or missing caps; broken, cracked or otherwise damaged seals or gaskets; broken or missing hatches; or broken or open access covers or other closure or bypass devices;

(b) conduct an audio inspection for pressure leaks and liquid leaks;

(c) conduct an olfactory inspection for unusual or strong odors;

(d) any positive detection during the AVO inspection shall be considered a leak; and

(e) a leak discovered by an AVO inspection shall be tagged with a visible tag and reported to management or their designee within three calendar days.

(2) The owner or operator of a facility with an annual average daily production of equal to or

less than 10 barrels of oil per day or an average daily production of equal to or less than 60,000 standard cubic feet per day of natural gas shall, at least monthly, conduct an audio, visual, and olfactory (AVO) inspection of thief hatches, closed vent systems, pumps, compressors, pressure relief devices, open-ended valves or lines, valves, flanges, connectors, piping, and associated equipment to identify a defect and leaking component as specified in Subparagraphs (a) through (e) of Paragraph (1) of Subsection (C) of 20.2.50.116 NMAC.

(3) The owner or operator of the following facilities shall conduct an inspection using U.S. EPA method 21 or optical gas imaging (OGI) of thief hatches, closed vent systems, pumps, compressors, pressure relief devices, open-ended valves or lines, valves, flanges, connectors, piping, and associated equipment to identify leaking components at a frequency determined according to the following schedules:

(a) for wellhead sites or tank battery facilities:

(i) annually at facilities with a PTE less than two tpy VOC;

(ii) semi-annually at facilities with a PTE equal to or greater than two tpy and less than five tpy VOC; and

(iii) quarterly at facilities with a PTE equal to or greater than five tpy VOC.

(b) for gathering and boosting sites, gas processing plants, and transmission compressor stations:

(i) quarterly at facilities with a PTE less than 25 tpy VOC; and

(ii) monthly at facilities with a PTE equal to or greater than 25 tpy VOC.

(c) for wellhead sites within 1,000 feet of an occupied area:

(i) quarterly at facilities with a PTE less than 5 tpy VOC; and

(ii) monthly at facilities with a PTE equal to or greater than 5 tpy VOC.

(4) Inspections using U.S. EPA method 21 shall meet the following requirements:

(a) the instrument shall be calibrated before each day of its use by the procedures specified in U.S. EPA method 21;

(b) the instrument shall be calibrated with zero air (less than 10 ppm of hydrocarbon in air), and a mixture of methane or n-hexane and air at a concentration near, but nor more than, 10,000 ppm methane or n-hexane; and

(c) a leak is detected if the instrument records a measurement of 500 ppm or greater of hydrocarbon and the measurement is not associated with normal equipment operation, such as pneumatic device actuation and crank case ventilation.

(5) Inspections using OGI shall meet the following requirements:

(a) the instrument shall comply with the specifications, daily instrument checks, and leak survey requirements set forth in Subparagraphs (1) through (3) of Paragraph (i) of 40 CFR 60.18;

(b) a leak is detected if the emission images recorded by the OGI instrument are not associated with normal equipment operation, such as pneumatic device actuation or crank case ventilation.

(6) Components that are difficult, unsafe, or inaccessible to monitor, as determined by the following conditions, are not required to be inspected until it becomes feasible to do so:

(a) difficult to monitor components are those that require elevating the monitoring personnel more than two meters above a supported surface, or that cannot be reached via a wheeled scissor-lift or hydraulic type scaffold that allows access to components up to seven and six tenths meters (25 feet) above the ground;

(b) unsafe to monitor components are those that cannot be monitored without exposing monitoring personnel to an immediate danger as a consequence of completing the monitoring; and

(c) inaccessible to monitor components are those that are buried, insulated, or obstructed by equipment or piping that prevents access to the components by monitoring personnel.

(7) Owners and operators with wellhead sites subject to the requirements contained in Subparagraph (c) of Paragraph (3) of Subsection (C) of 20.2.50.116 NMAC must conduct an evaluation to determine applicability within 30 days of constructing a new wellhead site and annually within 90 days of the effective date of this Part for existing wellhead sites. Homeowners may contact NMED to request an owner or operator conduct the evaluation required by this Part.

(8) The leak survey requirements of Paragraphs (3) to (6) of Subsection (C) of 20.2.50.116 NMAC shall not apply to facilities where leak surveys are not anticipated to result in emissions reductions. Such facilities include satellite facilities, injection wellhead sites, and temporarily abandoned wellhead sites.

(9) The owner or operator of a wellhead site that becomes an inactive wellhead site after the effective date of this Part must complete the next inspection required under Paragraph (3) of Subsection (C) of 20.2.50.116 NMAC no sooner than 30 days after the site becomes an inactive wellhead site. Following this

inspection, the owner or operator of an inactive wellhead site shall conduct the inspections required by Paragraph (3) of Subsection (C) of 20.2.50.116 NMAC annually.

D. Alternative equipment leak monitoring plans: As an equivalent means of compliance with Subsection C of 20.2.50.116 NMAC, an owner or operator may comply with the equipment leak requirements through an alternative monitoring plan as follows:

(1) An owner or operator may comply with an individual alternative monitoring plan, subject to the following requirements:

(a) proposed alternative monitoring plans may utilize alternative monitoring methods.

(~~a~~b) the proposed alternative monitoring plan shall be submitted to and approved by the department prior to conducting monitoring under that plan.

(~~b~~c) the department may terminate an approved alternative monitoring plan if the department finds that the owner or operator failed to comply with a provision of the plan and failed to correct and disclose the violation to the department within 15 calendar days of identifying the violation.

(~~c~~d) upon department denial or termination of an approved alternative monitoring plan, the owner or operator shall comply with the default monitoring requirements under Subsection C of 20.2.50.116 NMAC within 15 days.

(2) An owner or operator may comply with a pre-approved monitoring plan maintained by the department, subject to the following requirements:

(a) the owner or operator shall notify the department of the intent to conduct monitoring under a pre-approved monitoring plan, and identify which pre-approved plan will be used, at least 15 days prior to conducting monitoring under that plan.

(b) the department may terminate the use of a pre-approved monitoring plan by the owner or operator if the department finds that the owner or operator failed to comply with the provision of the plan and failed to correct and disclose the violation to the department within 15 calendar days of identifying the violation.

(c) upon department denial or termination of an approved alternative monitoring plan, the owner or operator shall comply with the default monitoring requirements under of Subsection C of 20.2.50.116.C NMAC within 15 days.

E. Repair requirements: For a leak detected pursuant to monitoring conducted under 20.2.50.116 NMAC:

(1) the owner or operator shall place a visible tag on the leaking component until the component has been repaired;

(2) leaks shall be repaired within 15 days of discovery, except for leaks detected using OGI, which shall be repaired within seven days of discovery;

(3) the equipment must be re-monitored no later than 15 days after discovery of the leak to demonstrate that it has been repaired; and

(4) if the leak cannot be repaired within 15 days of discovery, or within seven days for a leak detected using OGI, without a process unit shutdown, the leak may be designated "Repair delayed," and must be repaired before the end of the next process unit shutdown.

F. Recordkeeping requirements:

(1) The owner or operator shall keep a record of the following for all AVO, RM21, OGI, or alternative equipment leak monitoring inspection conducted as required under 20.2.50.116 NMAC, and shall provide the record to the department upon request:

(a) facility location;

(b) date of inspection;

(c) monitoring method (e.g. AVO, RM 21, OGI, alternative method approved by the department);

(d) name of the personnel performing the inspection;

(e) a description of any leak requiring repair or a note that no leak was found; and

(f) whether a visible flag was placed on the leak or not;

(2) The owner or operator shall keep the following record for any leak that is detected:

(a) the date the leak is detected;

(b) the date of attempt to repair;

(c) for a leak with a designation of "repair delayed" the following shall be recorded:

(i) reason for delay if a leak is not repaired within the required number of days after discovery;

(ii) signature of the authorized representative who determined that the repair could not be implemented without a process unit shutdown;

(d) date of successful leak repair;

(e) date the leak was monitored after repair and the results of the monitoring; and

(f) a description of the component that is designated as difficult, unsafe, or inaccessible to monitor, an explanation stating why the component was so designated, and the schedule for repairing and monitoring the component.

(3) For a leak detected using OGI, the owner or operator shall keep records of the specifications, the daily instrument check, and the leak survey requirements specified at 40 CFR 60.18(i)(1)-(3).

(4) The owner or operator shall comply with the recordkeeping requirements in 20.2.50.112 NMAC.

G. Reporting requirements:

(1) The owner or operator shall certify the use of an alternative equipment leak monitoring plan under Subsection D of 20.2.50.116 NMAC to the department annually, if used.

(2) The owner or operator shall comply with the reporting requirements in 20.2.50.112 NMAC.

[20.2.50.116 NMAC - N, XX/XX/2021]

20.2.50.117 NATURAL GAS WELL LIQUID UNLOADING:

A. Applicability: Liquid unloading operations including down-hole well maintenance events at natural gas wells are subject to the requirements of 20.2.50.117 NMAC.

B. Emission standards:

(1) The owner or operator of a natural gas well shall use best management practices during the life of the well to avoid the need for liquid unloading.

(2) The owner or operator of a natural gas well shall use the following best management practices during liquid unloading to minimize emissions, consistent with well site conditions and good engineering practices:

(a) reduce wellhead pressure before blowdown;

(b) monitor manual liquid unloading in close proximity to the well or via remote telemetry; and

(c) close well head vents to the atmosphere and return the well to normal production operation as soon as practicable.

(3) The owner or operator of a natural gas well shall use one of the following methods to reduce emissions during an unloading event:

(a) installation and use of a plunger lift;

(b) installation and use of an artificial lift engine; or

(c) installation and use of a control device.

(4) The owner or operator of a natural gas well shall install an EMT on the natural gas well in accordance with 20.2.50.112 NMAC.

C. Monitoring requirements:

(1) The owner or operator shall monitor the following parameters during liquid unloading:

(a) wellhead pressure;

(b) flow rate of the vented natural gas (to the extent feasible); and

(c) duration of venting to the storage vessel or atmosphere.

(2) The owner or operator shall calculate the volume and mass of VOC vented during a liquid unloading event.

(3) A liquid unloading event shall include the scanning of the EMT and monitoring data entry in accordance with the requirements of 20.2.50.112 NMAC.

(4) The owner or operator shall comply with the monitoring requirements in 20.2.50.112 NMAC.

D. Recordkeeping requirements:

(1) The owner or operator shall keep the following records for liquid unloading:

(a) identification number and location of the well;

(b) date the liquid unloading was performed;

(c) wellhead pressure;

(d) flow rate of the vented natural gas (to the extent feasible. If not feasible, the

owner or operator shall use the maximum potential flow rate in the emission calculation);

(e) duration of venting to the storage vessel or atmosphere;

(f) a description of the management practice used to minimize release of VOC emissions before and during the liquid unloading;

(g) the type of control device used to control VOC emissions during the liquid unloading; and

(h) a calculation of the VOC emissions vented during the liquid unloading based on the duration, volume, and mass of VOC.

(2) The owner or operator shall comply with the recordkeeping requirements in 20.2.50.112 NMAC.

E. Reporting requirements: The owner or operator shall comply with the reporting requirements in 20.2.50.112 NMAC.

[20.2.50.117 NMAC - N, XX/XX/2021]

20.2.50.118 GLYCOL DEHYDRATORS:

A. Applicability: Glycol dehydrators with a PTE equal to or greater than two tpy of VOC and located at wellhead sites, tank batteries, gathering and boosting sites, natural gas processing plants, and transmission compressor stations are subject to the requirements of 20.2.50.118 NMAC.

B. Emission standards:

(1) Existing glycol dehydrators with a PTE equal to or greater than two tpy of VOC shall achieve a minimum combined capture and control efficiency of ninety-five percent of VOC emissions from the still vent and flash tank no later than two years after the effective date. If a combustion control device is used, the combustion control device shall have a minimum design combustion efficiency of ninety-eight percent.

(2) New glycol dehydrators with a PTE equal to or greater than two tpy of VOC shall achieve a minimum combined capture and control efficiency of ninety-five percent of VOC emissions from the still vent and flash tank upon startup. If a combustion control device is used, the combustion control device shall have a minimum design combustion efficiency of ninety-eight percent.

(3) The owner or operator of a glycol dehydrator shall comply with the following requirements:

(a) still vent and flash tank emissions shall be routed at all times to the reboiler firebox, condenser, combustion control device, fuel cell, to a process point that either recycles or recompresses the emissions or uses the emissions as fuel, or to a VRU that reinjects the VOC emissions back into the process stream or natural gas gathering pipeline;

(b) if a VRU is used, it shall consist of a closed loop system of seals, ducts and a compressor that reinjects the natural gas into the process or the natural gas pipeline. The VRU shall be operational at least ninety-five percent of the time the facility is in operation, resulting in a minimum combined capture and control efficiency of ninety-five percent. The VRU shall be installed, operated, and maintained according to the manufacturer's specifications;

(c) still vent and flash tank emissions shall not be vented to the atmosphere; and

(d) the owner or operator of a glycol dehydrator shall install an EMT on the glycol dehydrator in accordance with 20.2.50.112 NMAC.

(4) an owner or operator complying with the requirements in Subsection B of 20.2.50.118 NMAC through use of a control device shall comply with the requirements in 20.2.50.115 NMAC.

(5) The requirements of Subsection B of 20.2.50.118 NMAC cease to apply when the uncontrolled actual annual VOC emissions from a new or existing glycol dehydrator are less than two tpy VOC.

C. Monitoring requirements:

(1) The owner or operator of a glycol dehydrator shall conduct an annual extended gas analysis on the dehydrator inlet gas and calculate the uncontrolled and controlled VOC emissions in tpy.

(2) The owner or operator of a glycol dehydrator shall inspect the glycol dehydrator, including the reboiler and regenerator, and the control device or process the emissions are being routed, semi-annually to ensure it is operating as initially designed and in accordance with the manufacturer recommended operation and maintenance schedule.

(3) An owner or operator complying with the requirements in Subsection B of 20.2.50.118 NMAC through the use of a control device shall comply with the monitoring requirements in 20.2.50.115 NMAC.

(4) Owners and operators shall comply with the monitoring requirements in 20.2.50.112 NMAC.

D. Recordkeeping requirements:

(1) The owner or operator of a glycol dehydrator shall maintain a record of the following:

(a) dehydrator location and identification number;

(b) glycol circulation rate, monthly natural gas throughput, and the date of the most recent throughput measurement;

(c) data and methodology used to estimate the PTE of VOC (must be a department approved calculation methodology);

(d) amount of controlled and uncontrolled VOC emissions in tpy;

(e) type, make, model, and identification number of the control device or process the emissions are being routed;

(f) date and results of any equipment inspection, including maintenance or repair activities required to bring the glycol dehydrator into compliance; and

(g) a copy of the glycol dehydrator manufacturer operation and maintenance recommendations.

(2) An owner or operator complying with the requirements in Paragraph (1) or (2) of Subsection B of 20.2.50.118 NMAC through use of a control device as defined in this Part shall comply with the recordkeeping requirements in 20.2.50.115 NMAC.

(3) The owner or operator shall comply with the recordkeeping requirements in 20.2.50.112 NMAC.

E. Reporting requirements: The owner or operator shall comply with the reporting requirements in 20.2.50.112 NMAC.

[20.2.50.118 NMAC - N, XX/XX/2021]

20.2.50.119 HEATERS:

A. Applicability: Natural gas-fired heaters with a rated heat input equal to or greater than 10 MMBtu/hour including heater treaters, heated flash separators, evaporator units, fractionation column heaters, and glycol dehydrator reboilers in use at wellhead sites, tank batteries, gathering and boosting sites, natural gas processing plants, and transmission compressor stations are subject to the requirements of 20.2.50.119 NMAC.

B. Emission standards:

(1) Natural gas-fired heaters shall comply with the emission limits in table 1 of 20.2.50.119 NMAC.

Table 1 - EMISSION STANDARDS FOR NO_x AND CO

Date of Construction:	NO_x (ppmvd @ 3% O_2)	CO (ppmvd @ 3% O_2)
Constructed or reconstructed before the effective date of 20.2.50 NMAC	30	300
Constructed or reconstructed on or after the effective date of 20.2.50 NMAC	30	130

(2) Existing natural gas-fired heaters shall comply with the requirements of 20.2.50.119 NMAC no later than one year after the effective date of this Part.

(3) New natural gas-fired heaters shall comply with the requirements of 20.2.50.119 NMAC upon startup.

(4) The owner or operator of a natural gas-fired heater shall install an EMT on the heater in accordance with 20.2.50.112 NMAC.

C. Monitoring requirements:

(1) The owner or operator shall:

(a) conduct emission testing for NOx and CO within 180 days of the compliance date specified in Paragraph (2) or (3) of Subsection B of 20.2.50.119 NMAC and at least every two years thereafter.

(b) inspect, maintain, and repair the heater in accordance with the manufacturer specifications at least once every two years following the applicable compliance date specified in 20.2.50.119 NMAC. The inspection, maintenance, and repair shall include the following:

(i) inspecting the burner and cleaning or replacing components of the burner as necessary;

(ii) inspecting the flame pattern and adjusting the burner as necessary to

optimize the flame pattern consistent with the manufacturer specifications and good engineering practices;

(iii) inspecting the AFR controller and ensuring it is calibrated and functioning properly;

(iv) optimizing total emissions of CO consistent with the NO_x requirement, manufacturer specifications, and good combustion engineering practices; and

(v) measuring the concentrations in the effluent stream of CO in ppmvd and O_2 in volume percent before and after adjustments are made in accordance with Subparagraph (c) of Paragraph (2) of Subsection C of 20.2.50.119 NMAC.

(2) The owner or operator shall comply with the following periodic testing requirements:

(a) conduct three test runs of at least 20-minutes duration within ten percent of one-hundred percent peak, or the highest achievable, load;

(b) determine NO_X and CO emissions and O_2 concentrations in the exhaust with a portable analyzer used and maintained in accordance with the manufacturer specifications and following the procedures specified in the current version of ASTM D6522;

(c) if the measured NO_X or CO emissions concentrations are exceeding the emissions limits of table 1 of 20.2.50.119 NMAC, the owner or operator shall repeat the inspection and tune-up in Subparagraph (b) of Paragraph (1) of Subsection C of 20.2.50.119 NMAC within 30 days of the periodic testing; and

(d) if at any time the heater is operated in excess of the highest achievable load plus ten percent, the owner or operator shall perform the testing specified in Subparagraph (a) of Paragraph (2) of Subsection C of 20.2.50.119 NMAC within 60 days from the anomalous operation.

(3) When conducting periodic testing of a heater, the owner or operator shall follow the procedures in Paragraph (2) of Subsection C of 20.2.50.119 NMAC. An owner or operator may deviate from those procedures by submitting a written request to use an alternative procedure to the department at least 60 days before performing the periodic testing. In the alternative procedure request, the owner or operator must demonstrate the alternative procedure's equivalence to the standard procedure. The owner or operator must receive written approval from the department prior to conducting the periodic testing using an alternative procedure.

(4) Prior to a monitoring, inspection, maintenance, or repair event, the owner or operator shall scan the EMT and the required monitoring data shall be captured in accordance with this Part.

D. Recordkeeping requirements: The owner or operator shall maintain a record of the following:

(1) location of the heater;

(2) summary of the complete test report and the results of periodic testing; and

(3) inspections, testing, maintenance, and repairs, which shall include at a minimum:

(a) the date the inspection, testing, maintenance, or repair was conducted;

(b) name of the personnel conducting the inspection, testing, maintenance, or repair;

(c) concentrations in the effluent stream of CO in ppmv and O_2 in volume percent; and

(d) the results of the inspections and any the corrective action taken.

E. Reporting requirements: The owner or operator shall comply with the reporting requirements in 20.2.50.112 NMAC.

[20.2.50.119 NMAC - N, XX/XX/2021]

20.2.50.120 HYDROCARBON LIQUID TRANSFERS:

A. Applicability: Hydrocarbon liquid transfers located at wellhead sites, tank batteries, gathering and boosting sites, natural gas processing plants, or transmission compressor stations are subject to the requirements of 20.2.50.120 NMAC beginning one year from the effective date of this Part.

B. Emission standards:

(1) The owner or operator of a hydrocarbon liquid transfer operation shall use vapor balance, vapor recovery, or a control device to control VOC emissions by at least ninety-eight percent when transferring liquid from a storage vessel to a transfer vessel, or when transferring liquid from a transfer vessel to a storage vessel.

(2) An owner or operator using vapor balance during a liquid transfer operation shall:

(a) transfer the vapor displaced from the vessel being loaded back to the vessel being emptied via a pipe or hose connected before the start of the transfer operation;

(b) ensure that the transfer does not begin until the vapor collection and return system is properly connected;

(c) ensure that connector pipes, hoses, couplers, valves, and pressure relief devices

are maintained in a leak-free condition;

(d) check the liquid and vapor line connections for proper connections before commencing the transfer operation; and

(e) operate transfer equipment at a pressure that is less than the pressure relief valve setting of the receiving transport vehicle or storage vessel.

(3) Bottom loading or submerged filling shall be used for the liquid transfer.

(4) Connector pipes and couplers shall be maintained in a leak-free condition.

(5) Connections of hoses and pipes used during liquid transfer operations shall be supported on drip trays that collect any leaks, and the materials collected shall be returned to the process or disposed of in a manner compliant with state law.

(6) Liquid leaks that occur shall be cleaned and disposed of in a manner that prevents emissions to the atmosphere, and the material collected shall be returned to the process or disposed of in a manner compliant with state law.

(7) An owner or operator complying with Paragraph (1) of Subsection B of 20.2.50.120 NMAC through use of a control device shall comply with the control device requirements in 20.2.50.115 NMAC.

C. Monitoring requirements:

(1) The owner or operator shall visually inspect the transfer equipment during a transfer operation to ensure that liquid transfer lines, hoses, couplings, valves, and pipes are not dripping or leaking. Leaking components shall be repaired to prevent dripping or leaking before the next transfer operation.

(2) The owner or operator of a liquid transfer operation controlled by a control device must follow manufacturer recommended operation and maintenance procedures for the device.

(3) Tanker trucks and tanker rail cars used in liquid transfer service shall be tested annually for vapor tightness in accordance with the following test methods and vapor tightness standards:

(a) method 27 of appendix A of 40 CFR Part 60. Conduct the test using a time period (t) for the pressure and vacuum tests of five minutes. The initial pressure (Pi) for the pressure test shall be 460 mm H_2O (18 inches H_2O), gauge. The initial vacuum (Vi) for the vacuum test shall be 150 mm H_2O (six inches H_2O) gauge. The maximum allowable pressure and vacuum changes (Δp, Δv) are shown in table 1 of 20.2.50.120 NMAC.

Table 1 - ALLOWABLE CARGO TANK TEST PRESSURE OR VACUUM CHANGE

Cargo tank or compartment capacity, liters (gallons)	Allowable vacuum change (Δv) in five minutes, mm H_2O (inches H_2O)	Allowable pressure change (Δp) in five minutes, mm H_2O (inches H_2O)
< 3,785 (< 1,000)	64 (2.5)	102 (4.0)
3,785 < 5,678 (1,000 < 1,500)	51 (2.0)	89 (3.5)
5,678 < 9,464 (1,500 < 2,500)	38 (1.5)	76 (3.0)
> 9,464 (> 2,500)	25 (1.0)	64 (2.5)

(b) pressure test the tanker truck or tanker railcar tank's internal vapor valve as follows:

(i) after completing the tests under Subparagraph (a) of Paragraph (3) of Subsection C of 20.2.50.120 NMAC, use the procedures in method 27 to re-pressurize the tank to 460 mm H_2O (18 inches H_2O) gauge. Close the tank's internal vapor valve, thereby isolating the vapor return line and manifold from the tank.

(ii) relieve the pressure in the vapor return line to atmospheric pressure, then reseal the line. After five minutes, record the gauge pressure in the vapor return line and manifold. The maximum allowable five-minute pressure increase is 130 mm H_2O (five inches H_2O).

(4) Owners and operators complying with Paragraph (1) of Subsection B of 20.2.50.120 NMAC through use of a control device shall comply with the monitoring requirements in 20.2.50.115 NMAC.

(5) Owners and operators shall comply with the monitoring requirements in 20.2.50.112 NMAC.

D. Recordkeeping requirements:

(1) The owner or operator shall maintain a record of the location of the storage vessel and if using a control device, the type, make, and model of the control device:

(2) The owner or operator shall maintain a record of the inspections and testing required in Subsection C of 20.2.50.120 NMAC and shall include the following:

(a) the time and date of the inspection and testing;

(b) the name of the personnel conducting the inspection and testing;
(c) a description of any problem observed during the inspection and testing; and
(d) the results of the inspection and testing and a description of any repair or corrective action taken.

(3) The owner or operator shall maintain a record for each site of the annual total hydrocarbon liquid transferred and annual total VOC emissions. Each calendar year, the owner or operator shall create a company-wide record summarizing the annual total hydrocarbon liquid transferred and the annual total calculated VOC emissions.

(4) The owner or operator shall comply with the recordkeeping requirements in 20.2.50.112 NMAC.

E. Reporting requirements: The owner or operator shall comply with the reporting requirements in 20.2.50.112 NMAC.

[20.2.50.120 NMAC - N, XX/XX/2021]

20.2.50.121 PIG LAUNCHING AND RECEIVING:

A. Applicability: Pipeline pig launching and receiving operations located within or outside of the property boundary of wellhead sites, tank batteries, gathering and boosting sites, natural gas processing plants, and transmission compressor stations are subject to the requirements of 20.2.50.121 NMAC.

B. Emission standards:

(1) Owners and operators of pipeline pig launching and receiving operations with a PTE equal to or greater than one tpy of VOC shall capture and reduce VOC emissions by at least ninety-eight percent, beginning on the effective date of this Part.

(2) The owner or operator conducting the pig launching and receiving operation shall:
(a) employ best management practices to minimize the liquid present in the pig receiver chamber and to prevent emissions from the pig receiver chamber to the atmosphere after receiving the pig in the receiving chamber and before opening the receiving chamber to the atmosphere;
(b) employ a method to prevent emissions, such as installing a liquid ramp or drain, routing a high-pressure chamber to a low-pressure line or vessel, using a ball valve type chamber, or using multiple pig chambers;
(c) recover and dispose of receiver liquid in a manner that prevents emissions to the atmosphere; and
(d) ensure that the material collected is returned to the process or disposed of in a manner compliant with state law.

(3) The emission standards in Paragraphs (1) and (2) of Subsection B of 20.2.50.121 NMAC cease to apply to a pipeline pig launching and receiving operation if the uncontrolled actual annual VOC emissions of the operation are less than one half ton per year of VOC.

(4) An owner or operator complying with Paragraph (2) of Subsection B of 20.2.50.121 NMAC through use of a control device shall comply with the control device requirements in 20.2.50.115 NMAC.

C. Monitoring requirements:

(1) The owner or operator of pig launching and receiving operations shall monitor the type and volume of liquid cleared.

(2) The owner or operator of pig launching and receiving operations shall inspect the equipment for a leak using RM 21 or OGI immediately before the commencement and immediately after the conclusion of the pig launching or receiving operation, and according to the requirements in 20.2.50.116 NMAC.

(3) An owner or operator complying with Paragraph (1) of Subsection B of 20.2.50.121 NMAC through use of a control device shall comply with the monitoring requirements in 20.2.50.115 NMAC.

(4) The owner or operator shall comply with the monitoring requirements in 20.2.50.112 NMAC.

D. Recordkeeping requirements:

(1) The owner or operator of pig launching and receiving operations shall maintain a record of the following:
(a) the pigging operation, including the date and time of the pigging operation and the type and volume of liquid cleared;
(b) the data and methodology used to estimate the actual emissions to the atmosphere and used to estimate the PTE; and
(c) the type of control device and its location, make, and model.

(2) The owner or operator shall comply with the recordkeeping requirements in 20.2.50.112 NMAC.

E. Reporting requirements: The owner or operator shall comply with the reporting requirements in 20.2.50.112 NMAC.

[20.2.50.121 NMAC - N, XX/XX/2021]

20.2.50.122 PNEUMATIC CONTROLLERS AND PUMPS:

A. Applicability: Natural gas-driven pneumatic controllers and pumps located at wellhead sites, tank batteries, gathering and boosting sites, natural gas processing plants, and transmission compressor stations are subject to the requirements of 20.2.50.122 NMAC.

B. Emission standards:

(1) A new natural gas-driven pneumatic controller or pump shall comply with the requirements of 20.2.50.122 NMAC upon startup.

(2) An existing natural gas-driven pneumatic pump shall comply with the requirements of 20.2.50.122 NMAC within three years of the effective date of this Part.

(3) An existing natural gas-driven pneumatic controller at a site with access to commercial line electrical power, and any existing natural-gas driven pneumatic controller at a transmission compressor station or a natural gas processing plant, shall comply with this Section within six months of the effective date of this Part.

(4) At sites that do not have access to commercial line electrical power, owners and operators shall retrofit their fleet of existing natural gas-driven pneumatic controllers according to the following schedule:~~shall comply with the requirements of 20.2.50.122 NMAC according to the following schedule:~~

TABLE 1. REQUIREMENTS FOR EXISTING NATURAL GAS-DRIVEN PNEUMATIC CONTROLLERS AT WELLHEAD SITES AND TANK BATTERIES.

Total Historic Percentage of Liquids Production at Facilities with Non-Emitting Controllers	Conversion Required by December 31, 2023	Maximum Percentage Requirement by December 31, 2023	Additional Conversion Required by May 1, 2025	Maximum Percentage Requirement by May 1, 2025	Conversion Required by May 1, 2027	Maximum Percentage Requirement by May 1, 2027
>75%	+10	92%	+8%	94%	+3%	96%
60–75%	+15	85%	+10%	93%	+7%	95%
40–60%	+20	75%	+18%	85%	+12%	92%
20–4 0%	+30	60%	+25%	78%	+15%	90%
0–20%	+35	50%	+25%	75%	+25%	90%

TABLE 2. REQUIREMENTS FOR EXISTING NATURAL GAS-DRIVEN PNEUMATIC CONTROLLERS AT GATHERING AND BOOSTING STATIONS.

Total Historic Percentage of Non-Emitting Controllers	Additional Percentage Required by May 1, 2023	Maximum Percentage Required by May 1, 2023	Additional Percentage Required by May 1, 2025	Maximum Percentage Required by May 1, 2025
> 75 %	+15%	97%	+5%	98%
> 60-75%	+20%	90%	+10%	98%
> 40-60 %	+25%	75%	+20%	95%
> 20-40 %	+35%	65%	+25%	90%
0-20 %	+40%	55%	+35%	90%

~~Table 1 – WELLHEAD SITES, TANK BATTERIES, GATHERING AND BOOSTING FACILITIES~~

~~Total Historic Percentage of Non-Emitting Controllers~~	~~Total Required Percentage of Non-Emitting Controllers by January 1, 2024~~	~~Total Required Percentage of Non-Emitting Controllers by January 1, 2027~~	~~Total Required Percentage of Non-Emitting Controllers by January 1, 2030~~
~~> 75 %~~	~~80%~~	~~85%~~	~~90%~~
~~> 60-75 %~~	~~80%~~	~~85%~~	~~90%~~
~~> 40-60 %~~	~~65%~~	~~70%~~	~~80%~~
~~> 20-40 %~~	~~45%~~	~~70%~~	~~80%~~
~~0-20 %~~	~~25%~~	~~65%~~	~~80%~~

~~Table 2 – NATURAL GAS COMPRESSOR STATIONS AND GAS PROCESSING PLANTS~~

~~Total Historic Percentage of Non-Emitting Controllers~~	~~Total Required Percentage of Non-Emitting Controllers by January 1, 2024~~	~~Total Required Percentage of Non-Emitting Controllers by January 1, 2027~~	~~Total Required Percentage of Non-Emitting Controllers by January 1, 2030~~
~~> 75 %~~	~~80%~~	~~95%~~	~~98%~~
~~> 60-75 %~~	~~80%~~	~~95%~~	~~98%~~
~~> 40-60 %~~	~~65%~~	~~95%~~	~~98%~~
~~> 20-40 %~~	~~50%~~	~~95%~~	~~98%~~
~~0-20 %~~	~~35%~~	~~95%~~	~~98%~~

(45) Standards for natural gas-driven pneumatic controllers.

(a) new pneumatic controllers shall have an emission rate of zero.

(b) existing pneumatic controllers at sites with access to commercial line electrical power, and any existing pneumatic controller at a transmission compressor station or a natural gas processing plant, shall have an emission rate of zero.

(c) At sites without access to commercial line electrical power, existing pneumatic controllers shall meet the required percentage of non-emitting controllers within the deadlines in tables 1 and 2 of Paragraph (~~3~~4) of Subsection B of 20.2.50.122 NMAC, and shall comply with the following:

(i) by January 1, 2023, the owner or operator shall determine the total controller count for all controllers at all of the owner or operator's affected facilities that commenced construction before the effective date of this Part. The total controller count must include all emitting pneumatic controllers and all non-emitting pneumatic controllers, except that pneumatic controllers that are permitted under Subparagraph (d) of Paragraph (4) of Subsection B of 20.2.50.122 NMAC, ~~necessary for a safety or process purpose that cannot otherwise be met without emitting natural gas~~ shall not be included in the total controller count.

(ii) determine which controllers in the total controller count are non-emitting and sum the total number of non-emitting controllers and designate those as total historic non-emitting controllers.

(iii) determine the total historic non-emitting percent of controllers by dividing the total historic non-emitting controller count by the total controller count and multiplying by 100.

(iv) based on the percent calculated in (iii) above, the owner or operator shall determine which provisions of tables 1 and 2 of Paragraph (~~3~~4) of Subsection B of 20.2.50.122 NMAC apply and the replacement schedule the owner or operator must meet.

~~**(v)** if an owner or operator meets at least seventy-five percent total non-emitting controllers by January 1, 2025, the owner or operator has satisfied the requirements of tables 1 and 2 of Paragraph (3) of Subsection B of 20.2.50.122 NMAC.~~

~~**(vi)** if after January 1, 2027, an owner or operator's remaining pneumatic controllers are not cost-effective to retrofit, the owner or operator shall submit a cost analysis of retrofitting those remaining units to the department. The department shall review the cost analysis and determine whether those units qualify for a waiver from meeting additional retrofit requirements.~~

(d) a pneumatic controller with a bleed rate greater than ~~six standard cubic feet per hour~~zero is permitted when the owner or operator has demonstrated that a higher bleed rate is required based on functional needs, including response time, safety, and positive actuation. An owner or operator that seeks to maintain operation of an emitting pneumatic controller must prepare and document the justification for the safety or

process purposes prior to the installation of a new emitting controller or the retrofit of an existing controller. The justification shall be certified by a qualified professional engineer.

(~~5~~6) Standards for natural gas-driven pneumatic pumps.

(a) pneumatic pumps located at a natural gas processing plants shall have an emission rate of zero.

(b) pneumatic pumps located at a wellhead sites, tank batteries, gathering and boosting sites, or transmission compressor stations with access to commercial line electrical power shall have an emission rate of zero.

(c) owners and operators of pneumatic pumps located at wellhead sites, tank batteries, gathering and boosting sites, or transmission compressor stations without access to commercial line electrical power shall reduce VOC emissions from the pneumatic pumps by ninety-five percent if it is technically feasible to route emissions to a control device, fuel cell, or process. If there is a control device available onsite but it is unable to achieve a ninety-five percent emission reduction, and it is not technically feasible to route the pneumatic pump emissions to a fuel cell or process, the owner or operator shall route the pneumatic pump emissions to the control device.

(~~6~~7) The owner or operator of a pneumatic controller or pump shall install an EMT on the controller or pump in accordance with 20.2.50.112 NMAC.

C. Monitoring requirements:

(1) Pneumatic controllers or pumps with a natural gas bleed rate equal to zero are not subject to the monitoring requirements in Subsection C of 20.2.5.122 NMAC.

(2) The owner or operator of a pneumatic controller subject to the deadlines set forth in table~~s~~ 1 ~~and 2~~ of Paragraph (~~3~~4) of Subsection B of 20.2.50.122 NMAC shall monitor the compliance status of each subject controller at each facility.

(3) The owner or operator of a pneumatic controller with a bleed rate greater than zero shall, on a monthly basis, scan the controller and conduct an AVO inspection, and shall also inspect the pneumatic controller, perform necessary maintenance (such as cleaning, tuning, and repairing a leaking gasket, tubing fitting and seal; tuning to operate over a broader range of proportional band; eliminating an unnecessary valve positioner), and maintain the pneumatic controller according to manufacturer specifications to ensure that the VOC emissions are minimized.

(4) The owner or operator of a pneumatic controller with a bleed rate greater than zero shall comply with the requirements in Paragraph (3) of Subsection C or Subsection D of 20.2.50.116 NMAC. During instrumental inspections, operators shall use Method 21, OGI, or alternative instruments used under Subsection D of 20.2.50.116 NMAC to verify that intermittent controllers are not emitting when not actuating. Any intermittent controller emitting when not actuating shall be repaired consistent with Subsection E of 20.2.50.116 NMAC. Pneumatic controllers found emitting detectable emissions are not subject to enforcement by the department unless the owner or operator fails to determine whether the pneumatic controller is operating properly, perform any necessary response, or keep required records, or submit reports in accordance with the rule.

(5) The EMT shall be linked to a database that contains the following:

(a) pneumatic controller identification number;

(b) type of controller (continuous or intermittent);

(c) if continuous, design continuous bleed rate in standard cubic feet per hour;

(d) if intermittent, bleed volume per intermittent bleed in standard cubic feet; and

(e) design annual bleed in standard cubic feet per year.

(~~5~~6) The owner or operator of a pneumatic pump with a bleed rate greater than zero shall, on a monthly basis, scan the pump and conduct an AVO inspection and shall also inspect the pneumatic pump and perform necessary maintenance, and maintain the pneumatic pump according to manufacturer specifications to ensure that the VOC emissions are minimized.

(~~6~~7) The owner or operator shall comply with the monitoring requirements in 20.2.50.112 NMAC.

D. Recordkeeping requirements:

(1) Pneumatic controllers and pumps with a natural gas bleed rate equal to zero are not subject to the recordkeeping requirements in Subsection D of 20.2.5.122 NMAC.

(2) The owner or operator shall maintain a record of the total controller count for all controllers at all of the owner's or operator's affected facilities that commenced operation before the effective date of this Part. The total controller count must include all emitting and non-emitting pneumatic controllers.

(3) The owner or operator shall maintain a record of the total count of pneumatic controllers

necessary for a safety or process purpose that cannot otherwise be met without emitting VOC.

(4) The owner or operator of a pneumatic controller subject to the requirements in table~~s~~ 1 ~~and 2~~ of Paragraph (~~3~~4) of shall generate a schedule for meeting the compliance deadlines for each pneumatic controller. The owner or operator shall keep a record of the compliance status of each subject controller.

(5) The owner or operator shall maintain an electronic record for each pneumatic controller with a natural gas bleed rate greater than zero. The record shall include the following:

(a) pneumatic controller identification number;

(b) inspection dates;

(c) name of the personnel conducting the inspection;

(d) AVO inspection result;

(e) AVO level discrepancy in continuous or intermittent bleed rate;

(f) maintenance date and maintenance activity; and

(g) a record of the justification and certification required in Subparagraph (d) of Paragraph (4) of Subsection B of 20.2.50.122 NMAC.

(6) The owner or operator of a natural gas-driven pneumatic controller with a bleed rate ~~greater than six standard cubic feet per hour~~zero shall maintain a record in the EMT database of the pneumatic controller documenting why a bleed rate greater than ~~six scf/hr~~zero is necessary, as required in Subsection B of 20.2.50.122 NMAC.

(7) The owner or operator shall maintain a record in the EMT database for a natural gas-driven pneumatic pump with an emission rate greater than zero and the associated pump number at the facility. The record shall include:

(a) for a natural gas-driven pneumatic pump in operation less than 90 days per calendar year, a record for each day of operation during the calendar year.

(b) a record of any control device designed to achieve at least a ninety-five percent emission reduction, including an evaluation or manufacturer specifications indicating the percentage reduction the control device is designed to achieve.

(c) records of the engineering assessment and certification by a qualified professional engineer that routing pneumatic pump emissions to a control device, fuel cell, or process is technically infeasible.

(8) The owner or operator shall comply with the recordkeeping requirements in 20.2.50.112 NMAC.

(9) The owner or operator of a pneumatic controller with a bleed rate greater than zero shall comply with the requirements in Subsection F of 20.2.50.116 NMAC.

E. Reporting requirements: The owner or operator shall comply with the reporting requirements in 20.2.50.112 NMAC.

[20.2.50.122 NMAC - N, XX/XX/2021]

20.2.50.123 STORAGE VESSELS

A. Applicability: Storage vessels with an uncontrolled PTE equal to or greater than two tpy of VOC and located at wellhead sites, tank batteries, gathering and boosting sites, natural gas processing plants, or transmission compressor stations are subject to the requirements of 20.2.50.123 NMAC.

B. Emission standards:

(1) An existing storage vessel with a PTE equal to or greater than two tpy and less than 10 tpy of VOC shall have a combined capture and control of VOC emissions of at least ninety-five percent no later than three years after the effective date of this Part.

(2) An existing storage vessel with a PTE equal to or greater than 10 tpy of VOC shall have a combined capture and control of VOC emissions of at least ninety-eight percent no later than one year after the effective date of this Part.

(3) A new storage vessel with a PTE equal to or greater than two tpy and less than 10 tpy of VOC shall have a combined capture and control of VOC emissions of at least ninety-five percent upon startup.

(4) A new storage vessel with a PTE equal to or greater than 10 tpy of VOC shall have a combined capture and control of VOC emissions of at least ninety-eight percent upon startup.

(5) The emission standards in Subsection B of 20.2.50.123 NMAC cease to apply to a storage vessel if the uncontrolled actual annual VOC emissions decrease to less than two tpy.

(6) If a control device is not installed by the date specified in Paragraphs (1) through (4) of Subsection B of 20.2.50.123 NMAC, an owner or operator may comply with Subsection B of 20.2.50.123 NMAC

by shutting in the well supplying the storage vessel by the applicable date, and not resuming production from the well until the control device is installed and operational.

~~**(7)** The owner or operator of a new or existing storage vessel with a thief hatch shall install a control device that allows the thief hatch to open sufficiently to relieve overpressure in the vessel and to automatically close once the vessel overpressure is relieved. The thief hatch shall be equipped with a manual lock-open safety device to ensure positive hatch opening during times of human ingress. The lock-open safety device shall only be engaged when an owner or operator are present and during an active ingress activity.~~

(8) The owner or operator of a new or existing storage vessel shall install an EMT on the storage vessel in accordance with 20.2.50.112 NMAC.

(9) An owner or operator complying with Paragraphs (1) through (4) of Subsection B of 20.2.50.123 NMAC through use of a control device shall comply with the control device operational requirements in 20.2.50.115 NMAC. Owners or operators of storage vessels with a PTE or actual emissions less than or equal to 5 TPY of VOC may comply with these requirements through use of an alternative control technology approved by the department, so long as the technology shall have a combined capture and control of VOC emissions of at least ninety-five percent.

C. Storage Vessel Measurement Requirements

(1) The owners and operators of controlled storage tanks at well production facilities, natural gas compressor stations, or natural gas processing plants constructed on or after the effective date of this Part, and at any facilities that are modified on or after the effective date of this Part such that an additional controlled storage vessel is constructed to receive an anticipated increase in throughput of hydrocarbon liquids or produced water, must use a storage vessel measurement system to determine the quantity of liquids in the storage tank(s).

(2) Owners and operators subject to the storage vessel measurement system requirements in this Subsection must keep thief hatches (or other access points to the tank) and pressure relief devices on storage tanks closed and latched during activities to determine the quality and/or quantity of liquids in the storage vessel(s).

(3) Operators may inspect, test, and calibrate the storage vessel measurement system semi-annually, or as directed by the Bureau of Land Management (see 43 CFR Section 3174.6(b)(5)(ii)(B) (November 17, 2016)) or system manufacturer. Opening the thief hatch if required to inspect, test, or calibrate the system is not a violation of Paragraph (1) of this Subsection.

(4) The owner or operator must install signage at or near the storage vessel that indicates which equipment and method(s) are used and the appropriate and necessary operating procedures for that system.

(5) The owner or operator must develop and implement an annual training program for employees and third parties conducting activities subject to this Subsection that includes, at a minimum, operating procedures for each type of system.

(6) Owner or operators must retain records for at least two (2) years and make such records available to the department upon request, including:

(a) Date of construction of the storage vessel or facility;

(b) Description of the storage tank measurement system used to comply with this Subsection;

(c) Date(s) of storage vessel measurement system inspections, testing, and calibrations pursuant to Paragraph (3) of this Subsection;

(d) Manufacturer specifications regarding storage vessel measurement system inspections, and/or calibrations, if followed pursuant to Paragraph (3) of this Subsection; and

(e) Records of the annual training program, including the date and names of persons trained.

D~~C~~. **Monitoring requirements:** The owner or operator of a storage vessel shall:

(1) monitor on a monthly basis the total monthly liquid throughput (in barrels) and the upstream separator pressure (in psig). When a storage vessel is unloaded less frequently than monthly, the throughput and separator pressure monitoring shall be conducted before the storage vessel is unloaded;

(2) conduct an AVO inspection on a weekly basis. If the storage vessel is unloaded less frequently than weekly, the AVO inspection shall be conducted before the storage vessel is unloaded;

(3) inspect the vessel monthly to ensure compliance with the requirements of 20.2.50.123 NMAC. The inspection shall include a check to ensure the vessel does not have a leak;

(4) scan the EMT and enter the required monitoring data in accordance with the requirements of 20.2.50.112 NMAC;

(5) comply with the monitoring requirements in 20.2.50.115 NMAC if using a control device to comply with the requirements in Paragraphs (1) through (4) of Subsection B of 20.2.50.123 NMAC; and

(6) comply with the monitoring requirements in 20.2.50.112 NMAC.

ED. Recordkeeping requirements:

(1) The owner or operator shall, on a monthly basis, maintain a record in accordance with 20.2.50.112 NMAC for a storage vessel. The record shall include:

(a) the vessel location and identification number;

(b) monthly liquid throughput and the most recent date of measurement;

(c) the average monthly upstream separator pressure;

(d) the data and methodology used to calculate the PTE of VOC (the calculation methodology shall be department approved);

(e) the controlled and uncontrolled VOC emissions (tpy); and

(f) the type, make, model, and identification number of any control device.

(2) A record of liquid throughput in shall be verified by a dated delivery receipt from the purchaser of the hydrocarbon liquid, the metered volume of hydrocarbon liquid sent downstream, or other proof of transfer.

(3) A record of the inspection required in Subsection C of 20.2.50.123 NMAC shall include:

(a) the time and date of the inspection;

(b) the personnel conducting the inspection;

(c) a notation that the required leak check was completed;

(d) a description of any problem observed during the inspection; and

(e) a description and date of any corrective action taken.

(4) An owner or operator complying with the requirements in Paragraphs (1) through (4) of Subsection B of 20.2.50.123 NMAC through use of a control device shall comply with the recordkeeping requirements in 20.2.50.115 NMAC.

(5) The owner or operator shall comply with the recordkeeping requirements in 20.2.50.112 NMAC.

E. Reporting requirements:

(1) An owner or operator complying with the requirements in Paragraphs (1) through (4) of Subsection B of 20.2.50.123 NMAC through use of a control device shall comply with the reporting requirements in 20.2.50.15 NMAC.

(2) The owner or operator shall comply with the reporting requirements in 20.2.50.112 NMAC.

[20.2.50.123 NMAC - N, XX/XX/2021]

20.2.50.124 WELL WORKOVERS

A. Applicability: Workovers performed at oil and natural gas wells are subject to the requirements of 20.2.50.124 NMAC as of the effective date of this Part.

B. Emission standards: The owner or operator of an oil or natural gas well shall use the following best management practices during a workover to minimize emissions, consistent with the well site condition and good engineering practices:

(1) reduce wellhead pressure before blowdown to minimize the volume of natural gas vented;

(2) monitor manual venting at the well until the venting is complete; and

(3) route natural gas to the sales line, if possible.

C. Monitoring requirements:

(1) The owner or operator shall monitor the following parameters during a workover:

(a) wellhead pressure;

(b) flow rate of the vented natural gas (to the extent feasible); and

(c) duration of venting to the atmosphere.

(2) The owner or operator shall calculate the volume and mass of VOC vented during a workover.

(3) The owner or operator shall comply with the monitoring requirements in 20.2.50.112 NMAC.

D. Recordkeeping requirements:

(1) The owner or operator shall keep the following record for a workover:

(a) identification number and location of the well;

(b) date the workover was performed;

(c) wellhead pressure;

(d) flow rate of the vented natural gas to the extent feasible, and if measurement of the flow rate is not feasible, the owner or operator shall use the maximum potential flow rate in the emission calculation;

(e) duration of venting to the atmosphere;

(f) description of the management practices used to minimize release of VOC before and during the workover; and

(g) calculation of the VOC emissions vented during the workover based on the duration, volume, and mass of VOC.

(2) The owner or operator shall comply with the recordkeeping requirements in 20.2.50.112 NMAC.

E. Reporting requirements

(1) The owner or operator shall comply with the reporting requirements in 20.2.50.112 NMAC.

(2) If it is not feasible to prevent VOC emissions from being emitted to the atmosphere from a workover event, the owner or operator shall notify by certified mail all residents located within one-quarter mile of the well of the planned workover at least three calendar days before the workover event.

[20.2.50.124 NMAC - N, XX/XX/2021]

20.2.50.125 SMALL BUSINESS FACILITIES

A. Applicability: Small business facilities as defined in this Part are subject to the requirements of 20.2.50.125 NMAC.

B. General requirements:

(1) The owner or operator shall ensure that all equipment is operated and maintained consistent with manufacturer specifications, and good engineering and maintenance practices. The owner or operator shall keep manufacturer specifications and maintenance practices on file and make them available to the department upon request.

(2) The owner or operator shall calculate the VOC and NO_x emissions from the facility on an annual basis. The calculation shall be based on the actual production or processing rates of the facility.

(3) The owner or operator shall maintain a database of company-wide VOC and NO_x emission calculations for all subject facilities and associated equipment and shall update the database annually.

(4) The owner or operator shall comply with Paragraph (10) of Subsection A of 20.2.50.112 NMAC if requested by the department.

C. Monitoring requirements: The owner or operator shall comply with the requirements in Subsections C or D of 20.2.50.116 NMAC.

D. Repair requirements: The owner or operator shall comply with the requirements of Subsection E of 20.2.50.116 NMAC.

E. Recordkeeping requirements: The owner or operator shall maintain the following electronic records for each facility:

(1) annual certification that the small business facility meets the definition in this Part;

(2) calculated VOC and NO_x emissions from each facility and the company-wide VOC and NO_x emissions for all subject facilities;

(3) records as required under Subsection F of 20.2.50.116 NMAC.

F. Reporting requirements: The owner or operator shall submit to the department an initial small business certification within sixty days of the effective date of this Part, and by March 1 each calendar year thereafter. The certification shall be made on a form provided by the department. The owner or operator shall comply with the reporting requirements in 20.2.50.112 NMAC.

G. Failure to comply with 20.2.50.125 NMAC: Notwithstanding the provisions of Section 20.2.50.125 NMAC, a source that meets the definition of a small business facility can be required to comply with the other Sections of 20.2.50 NMAC if the Secretary finds based on credible evidence that the source (1) presents an imminent and substantial endangerment to the public health or welfare or to the environment; (2) is not being operated or maintained in a manner that minimizes emissions of air contaminants; or (3) has violated any other requirement of 20.2.50.125 NMAC.

[20.2.50.125 NMAC - N, XX/XX/2021]

20.2.50.126 PRODUCED WATER MANAGEMENT UNITS

A. Applicability: Produced water management units as defined in this Part are subject to 20.2.50.126 NMAC and shall comply with these requirements no later than 180 days after the effective date of this Part.

B. Emission standards:

(1) The owner or operator shall use best management and good engineering practices to minimize emissions of VOC from produced water management units.

(2) The owner or operator shall control VOC emissions from each produced water management unit to less than two tons per year.

C. Monitoring requirements: The owner or operator shall:

(1) calculate the monthly rolling 12-month total of VOC emissions in tons from each unit;

(2) monthly, monitor the best management and engineering practices implemented to reduce emissions at each unit to ensure their effectiveness; and

(3) comply with the monitoring requirements in 20.2.50.112 NMAC.

D. Recordkeeping requirements:

(1) The owner or operator shall maintain the following electronic records for each produced water management unit:

(a) name or identification of the unit and UTM coordinates of the unit and county;

(b) a description of the best management and engineering practices used to minimize release of VOC at the unit; and

(c) a record of the monthly rolling 12-month total VOC emissions from each unit.

(2) The owner or operator shall comply with the recordkeeping requirements in 20.2.50.112 NMAC.

E. Reporting requirements: The owner or operator shall comply with the reporting requirements in 20.2.50.112 NMAC.

[20.2.50.126 NMAC - N, XX/XX/2021]

20.2.50.127 REQUIREMENTS FOR FLOWBACK VESSELS AND PREPRODUCTION OPERATIONS

(A) Applicability: Wells undergoing recompletions and new wells being completed at an existing wellhead site are subject to the requirements of 20.2.50.127 NMAC one year after the effective date of this Part. New wells constructed at a new wellhead site that commence completion or recompletion after the effective date of this Part are subject to the requirements of 20.2.50.127 NMAC.

(B) Emissions standards:

(1) The owner or operator of a well must collect and control emissions from each flowback vessel on and after the date flowback is routed to the flowback vessel by routing emissions to an operating control device that achieves a hydrocarbon control efficiency of at least 95 percent. If a TO or ECD is used, it must have a design destruction efficiency of at least 98 percent for hydrocarbons.

(a) the owner or operator shall ensure that a control device used to comply with emission standards in the Part operates as a closed vent system that captures and routes VOC emissions to the control device, and that unburnt gas is not directly vented to the atmosphere.

(b) flowback vessels must be inspected, tested, and refurbished where necessary to ensure the flowback vessel is in compliance with 20.2.50.127.B(1)(a) NMAC prior to receiving flowback.

(c) the owner or operator shall use a vessel measurement system to determine the quantity of liquids in the flowback vessel(s).

(i) Thief hatches or other access points to the flowback vessel must remain closed and latched during activities to determine the quantity of liquids in the flowback vessel(s).

(ii) Opening the thief hatch or other access point if required to inspect, test, or calibrate the vessel measurement system or to add biocides or chemicals is not a violation of 20.2.50.115.H(1)(a)(i) NMAC.

(C) Monitoring:

(1) Owners and or operators of a well with flowback that begins on or after the effective date of 20.2.50 NMAC, must conduct daily visual inspections of the flowback vessel and any associated equipment, including

(a) visual inspection of any thief hatch, pressure relief valve, or other access point to ensure that they are closed and properly seated.

(b) visual inspection or monitoring of the control device to ensure that it is

operating.

(c) visual inspection of the control device to ensure that the valves for the piping from the flowback vessel to the control device are open.

(D) Recordkeeping:

(1) The owner or operator of each flowback vessel subject to Paragraph (1) of Subsection B of Section 20.2.50.127 NMAC must maintain records for a period of five (5) years and make them available to the the department upon request, including

(a) the API number of the well and the associated facility location, including latitude and longitude coordinates.

(b) the date and time of the onset of flowback.

(c) the date and time the flowback vessels were permanently disconnected, if applicable.

(d) the date and duration of any period where the control device is not operating.

(e) records of the inspections required in Subsection C of Section 20.2.50.127 NMAC, including the time and date of each inspection, a description of any problems observed, a description and date of any corrective action(s) taken, and the name of the employee or third party performing corrective action(s).

20.2.50.128~~7~~ PROHIBITED ACTIVITY AND CREDIBLE ~~INFORMATION PRESUMPTION~~EVIDENCE

A. Failure to comply with the emissions standards, monitoring, recordkeeping, reporting or other requirements of this Part within the timeframes specified shall constitute a violation of this Part subject to enforcement action under Section 74-2-12 NMSA 1978.

B. If credible evidence or information obtained by the department or provided to the department by a third party indicates that a source is not in compliance with the provisions of this Part, that information may be used by the department for the purpose of establishing whether a person has violated or is in violation of this Part.

~~**C.** If credible information provided to the department by a member of the public indicates that a source is not in compliance with the provisions of this Part, the source shall be presumed to be in violation of this Part unless and until the owner or operator provides credible evidence or information demonstrating otherwise.~~

[20.2.50.127 NMAC - N, XX/XX/2021]

HISTORY OF 20.2.50 NMAC: [**RESERVED**]

CCP AND NAVA EP EXHIBIT 6

REBUTTAL TESTIMONY OF TECHNICAL WITNESS PROFESSOR CLIFFORD J. VILLA

I. INTRODUCTION AND PURPOSE OF TESTIMONY

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Clifford J. Villa. My business address is 1117 Stanford Dr. NE, Albuquerque, New Mexico 87106.

Q. PLEASE STATE ON WHOSE BEHALF YOU ARE SUBMITTING THIS REBUTTAL TESTIMONY.

A. I am submitting rebuttal testimony on behalf of the Center for Civic Policy (CCP) and NAVA Education Project (NAVA EP).

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY REGARDING THIS MATTER?

A. I am providing testimony in response to changes to NMED's proposed ozone precursor rule for the oil and gas sector that have been proposed by the New Mexico Oil and Gas Association (NMOGA) that would require less frequent leak detection inspections. I am also providing testimony in response to direct testimony offered in support of the "proximity" leak detection and repair proposals by Hillary Hull of the Environmental Defense Fund, which identifies how a significant number of people who are members of historically marginalized communities live in close proximity to low-producing oil and gas wells and are at risk of health harms from oil and gas pollution due to this close proximity.

The purpose of my testimony is to note the long history of how federal and state environmental regulations have failed to adequately protect communities of color and low-

income people from disparate air pollution harms, including in New Mexico, and to state that based on my legal scholarship and analysis, the Environmental Improvement Board (EIB) has a mandatory duty to consider and protect against such disparate air pollution harms in this rulemaking.

II. PROFESSIONAL QUALIFICATIONS

Q. WHO IS YOUR CURRENT EMPLOYER?

A. I am currently employed as a tenured professor at the University of New Mexico (UNM) School of Law in Albuquerque, New Mexico. Before receiving tenure and promotion in June of 2021, I was an associate professor of the same school since June of 2018 and started as an assistant professor in June of 2015.

Q. PLEASE STATE YOUR RELEVANT PRIOR EMPLOYMENT HISTORY.

A. Prior to my employment at UNM, I worked full-time as an attorney for the U.S. Environmental Protection Agency (EPA). I began my EPA career as an Honors Attorney with the U.S. EPA Office of Enforcement and Compliance Assurance in Washington D.C. from October 1993 to February 1995. From February 1995 to October 1996, I worked as an Enforcement Attorney for the U.S. EPA Region 8, based in Denver, Colorado. Subsequently, I worked as Assistant Regional Counsel for the U.S. EPA Region 10, based in Seattle Washington, from November 1996 to June 2015.

I was also employed as an Adjunct Professor at the Seattle University School of Law from August 2006 to June 2015.

Q. WHAT WERE YOUR RELEVANT AREAS OF WORK AT THE U.S. EPA?

A. My work for over two decades at the U.S. EPA focused on the application of nearly all federal pollution control laws administered by the EPA, including the Clean Air Act, the Clean Water Act, and the federal Superfund statute. My work involved addressing concerns regarding hazardous pollutants including Volatile Organic Compounds such as benzene and toluene. My work at the EPA also focused heavily on incorporating environmental justice concerns into compliance and enforcement, ensuring protections for indigenous, immigrant, and low-income communities, for example.

Q. PLEASE DESCRIBE YOUR RELEVANT SCHOLARSHIP, TEACHING, AND BROADER PUBLIC ENGAGEMENT AS A LAW PROFESSOR.

A. My primary focus as both a scholar and a teacher at UNM and Seattle University has been the teaching of environmental law and the law of environmental justice. This has included teaching environmental law and environmental enforcement at both schools and teaching a law school seminar dedicated to environmental justice at UNM.

In addition, my scholarship is focused on environmental law and environmental justice. I am a co-author of a casebook on environmental law, A PRACTICAL INTRODUCTION TO ENVIRONMENTAL LAW (Carolina Academic Press 2017) (with Joel Mintz, Steve Gold, Kalyani Robbins, John Dernbach, and Wendy Wagner). I am also the lead author of a textbook on environmental justice, ENVIRONMENTAL JUSTICE: LAW, POLICY & REGULATION, THIRD ED. (Carolina Academic Press 2020) (with Rebecca Bratspies, Nadia Ahmad, and Roger Lin).

I have additionally published or have accepted for publication in scholarly journals several articles that focus on or address environmental justice. These include the following:

- *Environmental Justice in Modern Practice*, 30 N.Y.U. ENVTL. L.J. __ (forthcoming 2022).
- *Brownfields Cleanup: Another Look at Superfund Removal Authority,* 26 VERMONT J. ENVTL. L. __ (forthcoming 2022).
- *Remaking Environmental Justice*, 66 LOYOLA L. REV. 469 (2020).
- *Fighting for Environmental Justice: The Life and Work of Professor Eileen Gauna*, 57 NAT. RESOURCES J. 519 (2017).

Finally, I have provided numerous professional presentations and trainings related to environmental justice (see Ex. 7 at 7). Among many others, these include providing a presentation on environmental justice to the Rocky Mountain Mineral Law Foundation's Annual Institute this past summer, and providing trainings on environmental justice to the New Mexico Environment Department and the EPA Region 10 Office.

In my employment at UNM, I also rotate in to supervise the UNM School of Law Natural Resources and Environmental Law Clinic. In that capacity, I have supervised numerous legal representations related to environmental justice. I should note that while I am generally a member of supervisory faculty of the clinic, I am not currently supervising any matters in the clinic and have not supervised any matters in the clinic since May of this year. I have not at any time served as an attorney in the representation of CCP or NAVA EP in relation to this hearing and will not play any role as an advocate in this hearing.

Q. IS CCP AND NAVA EP EXHIBIT 7 AN ACCURATE COPY OF YOUR CURRICULUM VITAE?

A. Yes, it is.

III. SUMMARY OF SUBSTANTIVE TESTIMONY

Q. CAN YOU SUMMARIZE YOUR SUBSTANTIVE TESTIMONY

A. My testimony today will highlight how federal and state environmental laws and regulations have historically failed to adequately prevent disparate pollution harms on communities of color and low-income communities, including in New Mexico. I will then discuss how the Environmental Improvement Board has a mandatory duty to consider such health harms under New Mexico Air Quality Control Act and federal and state case law.

IV. MATERIALS REVIEWED TO PREPARE TESTIMONY

Q. WHAT MATERIALS FROM THIS RULEMAKING HAVE YOUR REVIEWED TO PREPARE YOUR TESTIMONY

A. I have reviewed the following materials:

- New Mexico Environment Department's (NMED's) Proposed Oil and Gas Sector Ozone Precursor Pollutants Rule, 20.2.50 NMAC (May 6, 2021).
- CCP and NAVA EP's proposed revisions to NMED's Proposed Oil and Gas Sector Ozone Precursor Pollutants Rule, 20.2.50 NMAC (July 28, 2021), CCP and NAVA EP Ex. 1.

- Direct Testimony of John Smitherman, Appendix A1, The New Mexico Oil and Gas Association's (NMOGA's) Notice of Intent to Present Technical Testimony (July 28, 2021).
- Appendix B, Redlines, The New Mexico Oil and Gas Association's (NMOGA's) Notice of Intent to Present Technical Testimony (July 28, 2021).
- Direct Testimony of Hillary Hull, Ex. SS, Environmental Defense Fund's Notice of Intent to Present Direct Testimony (July 28, 2021).
- Draft Rebuttal Testimony of Lee Ann L. Hill, MPH, PSE Health Energy, Clean Air Advocates' Notice of Intent to Present Rebuttal Testimony (not filed at the time of review).

Q. DID YOU SPECIFICALLY REVIEW NMOGA'S PROPOSED CHANGES TO NMED'S PROVISIONS FOR CONTROLLING EMISSIONS EQUIPMENT LEAKS AND FUGITIVE EMISSIONS IN PROPOSED SECTION 20.2.50.116 NMAC?

A. Yes, I did.

Q. WHAT DID YOU NOTICE GENERALLY ABOUT NMOGA'S PROPOSALS AS THEY COMPARE TO NMED'S PROPOSAL?

A. In general, NMOGA proposes to reduce the frequency of Leak Detection and Repair (LDAR) inspections for oil and gas facilities.

Q. DID YOU SPECIFICALLY REVIEW CCP AND NAVA EP'S PROPOSED CHANGES TO NMED'S PROVISIONS FOR CONTROLLING EMISSIONS EQUIPMENT LEAKS AND FUGITIVE EMISSIONS IN PROPOSED SECTION 20.2.50.116 NMAC?

A. Yes, I did.

Q. WHAT DID YOU NOTICE GENERALLY ABOUT CCP AND NAVA EP'S PROPOSALS AS THEY COMPARE TO NMED'S PROPOSAL?

A. In general, CCP and NAVA EP propose to increase the frequency of LDAR inspections for wellhead sites that are within 1000 feet of occupied buildings.

Q. DID YOU SPECIFICALLY REVIEW HILLARY HULL'S TESTIMONY RELATED TO THIS "LDAR PROXIMITY" PROPOSAL TO INCREASE THE FREQUENCY OF LDAR INSPECTIONS WITHIN 1000 FEET OF OCCUPIED BUILDINGS?

A. Yes, I did.

Q. WHAT DID YOU NOTICE GENERALLY ABOUT MS. HULL'S TESTIMONY RELATED TO THIS LDAR PROPOSAL AS IT RELATES TO THE DEMOGRAPHIC IMPACTS OF THE PROPOSAL?

A. I noticed that many New Mexicans belonging to historically marginalized social and economic groups live within 1000 feet of affected wellhead sites, including 2,700 children under the age of 5, more than 4,500 adults 65 years or older, more than 5,700 individuals who are living in poverty, and some 19,000 people of color, including over 5,800 Native Americans.

Q. DID YOU ALSO REVIEW DRAFT TESTIMONY FROM LEE ANN L. HILL, MPH, OF PSE HEALTH ENERGY, THAT YOU UNDERSTAND WILL BE PRESENTED AS PART OF THE CLEAN AIR ADVOCATES' REBUTTAL TESTIMONY?

A. Yes, I did.

Q. WHAT DID YOU NOTE GENERALLY ABOUT MS. HILL'S TESTIMONY?

A. I noted from Ms. Hill's testimony that there is a reasonable degree of scientific certainty that living in close proximity to oil and gas facilities results in increased health risks and

impacts from elevated air pollution levels, and that these risks would be disproportionately experienced by people who live, work and go to school near oil and gas facilities.

Q. WHAT OVERALL OBSERVATIONS DID YOU MAKE BASED ON YOUR REVIEW OF THESE MATERIALS?

A. My overall observations were that there are a substantial number of people from historically marginalized communities who are particularly at risk of health harms from oil and gas infrastructure because of the close proximity of where they live, work, and attend school. My further observations are that NMOGA's proposal would generally reduce the frequency of inspections for leaks at low potential-to-emit facilities compared to NMED's proposal. In contrast, the CCP and NAVA EP proposal would increase the frequency of inspections at facilities that are in close proximity to where New Mexicans live, work and attend school.

V. FEDERAL AND STATE ENVIRONMENTAL LAWS AND REGULATIONS HAVE A HISTORY OF FAILING TO ADEQUATELY PROTECT LOW-INCOME AND MINORITY COMMUNITIES IN NEW MEXICO

Q. CAN YOU DESCRIBE WHAT IS MEANT BY ENVIRONMENTAL JUSTICE?

A. Although there are various definitions of environmental justice, the most enduring and commonly applied definition is the one that has been established by the U.S. EPA for at least 20 years. According to this "standard definition," the term "environmental justice" means:

> "the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, in the development, implementation, and enforcement of

environmental laws, regulations, and policies." U.S. EPA, ENVIRONMENTAL JUSTICE (2020), https://www.epa.gov/environmentaljustice.

The State of New Mexico has adopted this definition of environmental justice verbatim. *See* Equity, New Mexico Environment Department website, https://www.env.nm.gov/general/environmental-justice-in-new-mexico/ (last visited Sept. 6, 2021).

One of the most common environmental injustices—or failures to treat all people fairly, regardless of race, color, national origin, or income—is when our environmental laws and regulations allow marginalized groups to be subject to higher levels of pollution than other groups of people.

Q. HAS SUCH ENVIRONMENTAL INJUSTICE OCCURRED HISTORICALLY IN NEW MEXICO?

A. Yes, there have been numerous examples of environmental injustices in New Mexico. In particular, Native American and Latino communities in New Mexico have been repeatedly exposed to disparate levels of pollution, as documented in numerous studies including FINAL REPORT: A REPORT OF ENVIRONMENTAL JUSTICE IN NEW MEXICO (ATRI 2004). As I detail in examples in my textbook on environmental justice and cover in my seminar on environmental justice, this has included the following illustrative examples, among others:

- The disparate impact of uranium mining on Native American communities, including Navajo miners, exposing them to increased incidence of lung cancer. *See* Eric Jantz, *Environmental Racism with a Faint Green Glow*, 58 NAT. RESOURCES J. 247, 251-252 (2017).

- The disparate impacts of hazardous waste sites on Latino and Native American populations throughout the state. In Española and the Santa Clara Pueblo, with minority populations greater than 93 percent, potential drinking water supplies have been contaminated for decades by the groundwater plume now associated with the North Avenue Plume Superfund Site. VILLA, *et al.* (2020) at 302. In the Village of Questa, with a predominantly Hispanic population (80th percentile nationally for "People of Color," EJSCREEN, Sept. 6, 2021), community groundwater and private wells have been contaminated for decades by the plume associated with what is now designated as the Chevron Questa Superfund Site.
- The disparate impacts of polluting industrial facilities and other environmental risks in the South Valley of Albuquerque, where there are higher concentrations of Hispanic residents and life expectancy ten years or more less compared to other neighborhoods of Bernalillo County. JOINT CENTER FOR POLITICAL AND ECONOMIC STUDIES, PLACE MATTERS FOR HEALTH IN BERNALILLO COUNTY 3-10 (Sept. 2012).

In fact, because of the prevalence of these types of harms, New Mexico organizations, such as the Southwest Organizing Project (SWOP) and Southwest Network for Environmental and Economic Justice (SNEEJ) helped found the Environmental Justice movement more than 30 years ago. For example, members of SWOP led the drafting and signing of the famous "Group of Ten" letter in 1990 that challenged mainstream environmental organizations to diversify their ranks and consider the diverse environmental and economic needs of communities of color. Members of SWOP and SNEEJ also helped organize the First National People of Color Environmental Leadership Summit in Washington, D.C., in

October 1991, leading to the enduring statement of "Principles of Environmental Justice." VILLA, *et al.* (2020) at 25-34. Today, one of the early leaders of both SWOP and SNEEJ, Richard Moore of Albuquerque, NM, sits as co-chair of President Biden's White House Environmental Justice Advisory Council.

Environmental injustice is not unique to New Mexico, but has been a common failing in the implementation of our environmental laws across the country to protect communities of color and low-income communities from disparate air pollution. *See, e.g.*, Luke W. Cole, *"Wrong on the Facts, Wrong on the Law": Civil Rights Advocates Excoriate EPA's Most Recent Title VI Misstep*, 29 ENVTL. L. REP. 10,775 (1999) (identifying exceedances of National Ambient Air Quality Standards in the airshed of Flint, Michigan, erroneously overlooked by the EPA Office of Civil Rights). Even so, environmental injustice remains frequent and pervasive in New Mexico. *See also,* VALERIE RANGEL, ENVIRONMENTAL JUSTICE IN NEW MEXICO: COUNTING COUP (History Press 2019).

VI. THE ENVIRONMENTAL IMPROVEMENT BOARD HAS A LEGAL MANDATE TO CONSIDER AND PREVENT DISPARATE IMPACTS OF POLLUTION

Q. DOES THE ENVIRONMENTAL IMPROVEMENT BOARD HAVE THE LEGAL AUTHORITY TO CONSIDER DISPARATE IMPACTS OF POLLUTION IN PROMULGATING REGULATIONS UNDER THE AIR QUALITY CONTROL ACT?

Y. Yes. In my analysis the Environmental Improvement Board must consider and give weight to the disparate impacts of pollution in promulgating regulations under the Air Quality Control Act under the text of the statute and relevant case law.

First the Air Quality Control Act mandates that the EIB "shall prevent or abate air pollution." NMSA 1978, § 74-2-5(B) (1953, as amended 2021). The Board is to "adopt … rules and standards consistent with the Air Quality Control Act to attain and maintain national ambient air quality standards *and* prevent or abate air pollution." NMSA 1978, § 74-2-5(C) (1953, as amended 2021) (emphasis added).

Second, the Air Quality Control Act provides that the EIB "shall give weight it deems appropriate to all facts and circumstances." § 74-2-5(F). Thus, the EIB has a mandatory obligation to give weight to those facts and circumstances it deems appropriate.

Moreover, the Act provides that the EIB must consider specific types of facts and circumstances. This includes a requirement that the EIB consider the "character and degree of injury to or interference with health [and] welfare." § 74-2-5(F)(1). It also includes a requirement that the EIB must consider facts and circumstances related to the "the public interest, including the social and economic value of … subjects of air contaminants." § 74-2-5(F)(2).

There can be no question that the "character and degree of interference with … health and welfare" must include consideration of any facts and circumstances related to whether a proposed regulation would result in disparate harms to low-income communities or communities of color. There can also be no question that such facts and circumstances pertain to the "public interest."

There is now a thirty-year history of federal and state action, and judicial opinions, that recognize that the disparate impacts of pollution on marginalized communities is a critical component of the "character and degree" of public health impacts. This includes the

following developments, among many others discussed in my Environmental Justice textbook:

- Since 1994, federal agencies have been subject to a federal Executive Order on Environmental Justice that requires federal agencies to conduct their programs, policies, and activities in a manner that "ensures such programs … do not have the effect of … subjecting persons (including populations) to discrimination under, such programs, policies, and activities, because of their race, color, or national origin." Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations, Exec. Order 12898, 59 Fed. Reg. 7629 (Feb. 16, 1994).
- Title VI of the Civil Rights Act of 1964 prohibits programs receiving federal funds—including state environmental permitting programs that rely in part on federal funding, such as state Clean Air Act compliance programs—from discriminating against any person on the grounds of race, color, or national origin. 42. U.S.C. § 2000d. EPA's regulations implementing this statutory prohibition specifically prohibit agencies receiving federal aid from using "criteria or methods of administering its program or activity which have the effect of subjecting individuals to discrimination because of their race, color, national origin, or sex, or have the effect of defeating or substantially impairing accomplishment of the objectives of the program or activity with respect to individuals of a particular race, color, national origin, or sex." 40 C.F.R. § 7.35(b). In other words, EPA regulations prohibit state agencies receiving federal funds, including NMED, from using criteria or methods of

administering regulatory programs in ways that would have discriminatory impact on groups of a particular race.

- In 2004, environmental justice experts submitted a report to NMED finding that NMED and the Environmental Improvement Board, as the "regulatory arm of the NMED," possessed legal authority to address environmental justice concerns. Judith Espinosa & Eileen Gauna, Environmental Justice Background Report for the New Mexico Environmental Department (Aug. 11, 2004) at 37. The report based this conclusion on legal authorities including the New Mexico Environmental Improvement Act, which identified purposes of the EIB to include promulgating rules and standards to ensure "environmental management and consumer protection." See 74-1-8 NMSA. The report concluded that "Environmental justice policies and standards embody the principles of consumer protection and the management of the environment as stated in the Act for all New Mexico residents including people of color and those disproportionately affected by damage done to their living environment. Espinosa & Gauna at 37.
- In 2005, the New Mexico Supreme Court ruled that in an adjudicatory hearing on landfill siting, environmental justice concerns were not only allowed to be considered, but required to be considered. *In re Application of Rhino Env't Servs.*, 2005-NMSC-024, ¶¶ 30, 33 (requiring "consideration of the cumulative effect of large-scale garbage dumps and industrial sites on a single community," noting that parties referred to this as an "Environmental Justice" concern). In that circumstance, the Court found that the Department had an obligation to consider such concerns in

order to realize the purpose of the Solid Waste Act—"protecting the 'public health, safety and welfare.'" Id. at ¶¶ 29, 34.

- New Mexico Environmental Justice Executive Order. On November 18, 2005, New Mexico Governor Bill Richardson signed Executive Order 2005-056: Environmental Justice Executive Order, which I understand remains in effect. The Executive Order declared that "the State of New Mexico is committed to affording all of its residents, including communities of color and low-income communities, fair treatment and meaningful involvement in the development, implementation, and enforcement of environmental laws, regulations, and policies regardless of race, color, ethnicity, religion, income or educational level." In furtherance of that policy statement, the Executive Order specifically applied to "all cabinet level departments and boards … that are involved in decisions that may affect environmental quality and public health…." By its terms, I believe this order specifically applies now to the Environmental Improvement Board. The Executive Order continues that all relevant department and board "shall … seek to address disproportionate exposure to environmental hazards and risks." (¶ 1). Moreover, "All relevant cabinet level departments and boards … shall utilize available environmental and public health data to address impacts in low-income communities and communities of color…." (¶ 3)
- In a 2008 opinion, the New Mexico Office of Attorney General ("Attorney General") considered whether the Albuquerque-Bernalillo County Air Quality Control Board ("Albuquerque-Bernalillo Board") could promulgate regulations that incorporate

environmental justice principles under the authority of the Air Quality Control Act. The Attorney General concluded that under "roadmap" provided by the New Mexico Supreme Court in *Rhino Env't Servs,* the Albuquerque-Bernalillo County Board did have the authority to adopt regulations that incorporated environmental justice principles. In particular, the Attorney General found that the Air Quality Control Act was analogous to the Solid Waste Act at issue in *Rhino Env't Servs* because it "provides sufficient statutory authorization … for the promulgation of regulations involving the consideration of public health and welfare …" and that therefore the Act authorized the consideration of environmental justice concerns. N.M. Att'y Gen. No. 08-03 (2008).

- Many federal courts have held that environmental justice concerns, and particularly disparate pollution impacts, are critical factors in environmental regulations and permitting. In fact, the federal 4th Circuit Court of Appeals recently held that the Virginia Air Pollution Control Board—a board very similar to the EIB—was required to take into account environmental justice considerations under very similar state statutory authority. As with Air Quality Control Act here in New Mexico, the Virginia statute in question required the Virginia board to consider "the character and degree of injury to ... health." All of the parties—and the court—agreed that this required the board to consider "environmental justice" in its analysis. *Friends of Buckingham v. State Air Pollution Control Bd.*, 947 F.3d 68, 87 (4th Cir. 2020). The Court moreover found that not only was the Board required to consider such analysis, but that the Board's actions violated the federal Administrative Procedure Act

> because the Board failed to accord sufficient weight to these environmental justice concerns. *Id.* In so holding, the Court pointedly observed that "environmental justice is not merely a box to be checked." *Id.* at 92.

In sum, there is widespread acceptance in federal and state law and regulation that a critical factor in ensuring the adequate and just protection of public health through pollution control laws and regulations includes ensuring that there is not any discriminatory impact of those regulations. In my analysis, the EIB therefore must consider such potential discriminatory impact as part of its mandatory duty to consider "facts and circumstances" related to the "character and degree" of public health impacts and to the public interest.

VII. THE ENVIRONMENTAL IMPROVEMENT BOARD SHOULD THEREFORE EXCLUDE ANY PROPOSALS TO EXEMPT SOURCES THAT WOULD DISPARATELY HARM MARGINALIZED POPULATIONS AND ACCEPT PROPOSALS THAT WOULD PROTECT SUCH POPULATIONS

Q. DO YOU HAVE ANY RECOMMENDATIONS TO THE BOARD FOR THIS REGULATION BASED ON ENVIRONMENTAL JUSTICE PRINCIPLES AND THE TESTIMONY THAT YOU HAVE REVIEWED?

A. Yes. I would recommend that Board reject any proposals for changes to the regulation that would have the potential to disparately harm marginalized populations, particularly communities of color. I would also recommend that the Board accept any reasonable proposals that would further protect marginalized populations from health harms.

I also have reviewed the proposals for changes to the regulation from NMOGA, and I see that they include proposals to subject low potential-to-emit wells to less frequent leak detection inspections. I also understand from testimony by Hillary Hull that many people of

color, including Native Americans, live in close proximity to such wells. I therefore recommend that in keeping with environmental justice principles, the EIB reject these proposals.

I have also reviewed the proposals from the coalition of non-profit organizations, including CCP and NAVA EP, that would require more frequent leak detection and repair for wellhead sites within 1000 feet of occupied buildings, and I have reviewed draft rebuttal testimony from Lee Ann L. Hill stating that there is a reasonable degree of scientific certainty that living in close proximity to oil and gas facilities results in increased health risks. Because many of the people who live in close proximity to these wells are people of color, I therefore I recommend the EIB adopt those provisions in keeping with the principles of environmental justice.

This concludes my rebuttal testimony, which is true and accurate to the best of my knowledge

Professor Clifford J. Villa

Sept 7, 2021

Date

CCP AND NAVA EP EXHIBIT 7

CLIFFORD J. VILLA

Professor of Law
University of New Mexico School of Law
villa@law.unm.edu
(206) 641-1134

ACADEMIC EXPERIENCE

Professor (with tenure), University of New Mexico School of Law. June 2021-present

Associate Professor, University of New Mexico School of Law. June 2018 – present

Assistant Professor, University of New Mexico School of Law. June 2015 – June 2018

Courses taught: Constitutional Rights; Environmental Law; Environmental Justice (writing seminar); Environmental Enforcement; Introduction to Natural Resources and Environmental Law; International Environmental Law (Madrid Summer Law Institute); Independent Study; Natural Resources and Environmental Law Clinic.

Academic service: UNM Law Dean Search Comm. (AY21-22); Faculty Retention, Promotion & Tenure Comm. (AY21-22); Chair, Student Suspension, Retention, and Readmission Comm. (AY20-21); Senate Graduate and Professional Comm. (AY19-present); UNMSOL COVID-19 Task Force (Summer 2020); Advisory Comm., UNM Land Grant Studies Program (AY19-present); Admissions Comm. (AY18); Chair, Building and Safety Comm. (AY15-AY17); Natural Resources Comm. (AY15-present); Faculty Appointments Comm. (AY15-16); Faculty Advisor, NATURAL RESOURCES JOURNAL (AY16-present); Faculty Advisor, Environmental Law Society (AY15-present); Faculty Advisor, Mexican American Law Students Ass'n (AY15-19); Latin American and Iberian Institute Grants and Awards Comm. (AY17).

Community Service: Board of Directors, Western Environmental Law Center (April 2020-present); Board Member, NMBA Section on Natural Resources, Energy, and Environmental Law (NREEL) (AY17-18); Rocky Mountain Mineral Law Foundation (RMMLF), Planning Committee, National Environmental Policy Act Institute (2019-2020); RMMLF Law Professors Task Force (2019).

Adjunct Professor, Seattle University School of Law. Aug. 2006 – June 2015

Courses taught: Environmental Law; Environmental Enforcement; Disaster Law (writing seminar); Advanced Legal Writing: Environmental Drafting; Alaska Natives and Environmental Law (Alaska Summer Program); Independent Study

Academic service: Faculty advisor, Environmental Law Society; Faculty advisor, Latina/o Law Students Ass'n; Co-founder, SEATTLE JOURNAL OF ENVIRONMENTAL LAW; Steering Comm., SU Center for Environmental Justice and Sustainability

LAW PRACTICE

Assistant Regional Counsel, U.S. EPA Region 10, Seattle, WA. Nov. 1996 – June 2015

- Represented EPA in administrative hearings, civil litigation, and criminal prosecution to enforce federal environmental laws including Clean Air Act and Oil Pollution Act.
- Negotiated with responsible parties to secure CERCLA cleanup and cost recovery at mining sites, military bases, industrial areas, Indian country, and other contaminated sites.
- Supported the EPA Region 10 Emergency Response Unit, providing timely legal assistance through means including emergency orders and administrative warrants.
- Counseled agency clients on requirements of Clean Water Act, Endangered Species Act, National Historic Preservation Act, and other applicable federal and state laws.
- Cooperated with foreign governments, including Canada, Mexico, and Chile, on efforts to improve enforcement capacity in conjunction with free trade agreements.
- Member, EPA Region 10 Environmental Justice Integration Team.
- Liaison Officer, Incident Command System; Instructor, EPA CERCLA Education Center.
- Acting Deputy Regional Counsel (2010); Acting Unit Manager (2011-2012, 2014).

Enforcement Attorney, U.S. EPA Region 8, Denver, CO. Feb. 1995 – Oct. 1996

- Negotiated multi-billion dollar agreement with State of Colorado and U.S. Dept. of Energy to provide for cleanup of former Rocky Flats nuclear weapons plant.
- Advised remedy selection for billion dollar cleanup of Army's Rocky Mountain Arsenal.
- Provided enforcement support for multimedia environmental programs, including Safe Drinking Water Act and Underground Storage Tanks.
- Chair, EPA Federal Facilities Esquires Workgroup.

Honors Attorney, U.S. EPA Office of Federal Facilities Enforcement, Washington D.C. Oct. 1993 – Feb. 1995

- Advised and monitored federal facilities enforcement actions in EPA Region 5
- (Mid-West Region) and Region 8 (Rocky Mountain Region).
- Represented EPA Headquarters in negotiations concerning Rocky Flats (DOE) and Rocky Mountain Arsenal (U.S. Army), commuting between D.C. and Denver.
- Supported military base closure restoration and reuse programs.
- Drafted speeches, letters, and Congressional testimony for political appointees.

EDUCATION

J.D., May 1993. Lewis & Clark Law School. Certificate in environmental law. Articles Editor, Lewis & Clark law review ENVIRONMENTAL LAW.

B.A. *summa cum laude*, May 1990. The University of New Mexico. Double major in English and economics; concentrations in professional writing and public finance.

WORKS-IN-PROGRESS

A PRACTICAL INTRODUCTION TO ENVIRONMENTAL LAW (2nd ed. forthcoming 2022).

Environmental Justice in Modern Practice, 30 N.Y.U. ENVTL. L.J. ___ (forthcoming 2022).

Brownfields Cleanup: Another Look at Superfund Removal Authority, 26 VERMONT J. ENVTL. L. ___ (forthcoming 2022).

Law and Lawyers in Disaster Response, *in* THE CAMBRIDGE HANDBOOK OF DISASTER LAW: RISK, RECOVERY, AND REDEVELOPMENT (Cambridge University Press, 2021).

SELECTED PUBLICATIONS

ENVIRONMENTAL JUSTICE: LAW, POLICY & REGULATION, THIRD ED. (Carolina Academic Press 2020), with Rebecca Bratspies, Nadia Ahmad, and Roger Lin.

Remaking Environmental Justice, 66 LOYOLA L. REV. 469 (2020).

Gold King Mine Spill: Environmental Law and Legal Protections for Environmental Responders, 2019 UTAH L. REV. 263 (2019).

Book Review: *River of Lost Souls: The Science, Politics, and Greed Behind the Gold King Mine Disaster,* 41 PUB. LAND & RESOURCES L. REV. 69 (2019).

- Reprinted in 2018 Animas & San Juan River Watershed conference proceedings, New Mexico State U. (2019).

Es FEMA El Problema? Hurricane Maria and the Slow Road to Recovery in Puerto Rico, LEGAL PLANET (May 17, 2018).

A PRACTICAL INTRODUCTION TO ENVIRONMENTAL LAW (Carolina Academic Press 2017), with Joel Mintz, Steve Gold, Kalyani Robbins, John Dernbach, and Wendy Wagner.

Is the "Act of God" Dead?, 7 WASH. J. ENVTL. L. & POL. 320 (2017).

Fighting for Environmental Justice: The Life and Work of Professor Eileen Gauna, 57 NAT. RESOURCES J. 519 (2017).

Dawning of Disaster Law, NORTHWEST LAWYER (Mar. 2016).

Clearing Up Questions on River Spill, ALBUQUERQUE JOURNAL, Aug. 13, 2015.

Rising from the Ravages, THE LAWYER (Sept. 2014), available in original form at http://www.law.seattleu.edu/news-and-features/news/2014-news-archives/professor-celebrates-philippines-typhoon-recovery-on-earth-day.

Law and Lawyers in the Incident Command System, 36 SEATTLE U. L. REV. 1855 (2013).

- Translated into Portuguese and anthologized in DELTON CARVALHO & DANIEL A. FARBER, ESTUDOS APROFUNDADOS EM DIREITO DOS DESASTRES (2nd ed. 2019).

The Practice of Disaster Law, ABA LAW PRACTICE TODAY (Mar. 2012).

The Road Taken: A Reflection on Michael C. Blumm & William Warnock's Roads Not Taken: EPA vs. Clean Water*,* 34 ENVTL. L. 809 (2004).

Superfund vs. Mega-Sites: The Coeur d'Alene River Basin Story, 28 COLUMBIA J. ENVTL. L. 255 (2003).

Cleaning Up at the Tracks: Superfund Meets Rails-To-Trails, 25 HARVARD ENVTL. L. REV. 481 (2001).

California Dreaming: Water Transfers from the Pacific Northwest, 23 ENVTL. L. 997 (1993).

SELECTED PRESENTATIONS

Environmental Justice – What It Is, When It Seeks to Help, and How to Address It, Rocky Mountain Mineral Law Foundation, 67th Annual Institute, July 23, 2021 (via Zoom).

Environmental Justice and Legal Ethics, WATER LAW IN WASHINGTON, Law Seminars Int'l, June 11, 2021 (via Zoom).

A Look Into the Future: Navigating the Environmental Justice Landscape, at ENVIRONMENTAL JUSTICE, Law Seminars Int'l, May 14, 2021 (via Zoom).

Brownfields Cleanup: A Look Backwards and Forwards Toward Superfund Authority, panel presentation at American Bar Ass'n, Section of Environment, Energy, and Resources, 50th Spring Conference on Environmental Law, April 28, 2021 (via Zoom).

Environmental Justice: New Day for the U.S.A., U. of Detroit Mercy School of Law, Feb. 25, 2021 (via Zoom).

Environmental Justice: A New Day at EPA, EPA Region 10. EPA Region 10 Alumni Speakers Series, Feb. 17, 2021 (via Zoom).

"We Speak for Ourselves": Environmental Justice and Community Perspectives, Los Padillas Elementary School, Albuquerque, NM, Jan. 29, 2021 (via Zoom).

"We Speak for Ourselves": Environmental Justice and the Power of Community Voices, Amy Biehl High School, Albuquerque, NM, Jan. 18, 2021 (via Zoom).

An Introduction to Environmental Justice, U. of Montana Blewett School of Law, Jan. 11, 2021 (via Zoom).

Gold King Mine Update, Annual Natural Resources, Energy, & Envt'l Law CLE, NM State Bar Ass'n, Dec. 18, 2020 (via Zoom).

Water Wars & Environmental Justice, in *Values, Ethics, and Shared Decision Making Conf.,* UNM Office of Interprofessional Education and Medical-Legal Alliance, Nov. 6, 2020 (via Zoom).

The Gold King Mine Spill, UNM Intro to Chemical and Biological Engineering, Oct. 21, 2020 (via Zoom).

Atlantic Richfield v. Christian (2020): Reinvigoration of Common Law Remedies for Remediation? NM Water Law Conf., Oct. 1, 2020 (via Zoom).

Superfund Meets Environmental Justice, City University of New York (CUNY) School of Law, Sept. 24, 2020 (via Zoom).

Diversity & Inclusion: Collaboration for Change, Hispanic National Bar Ass'n, Aug. 28, 2020 (via Zoom). Panel presentation with Prof. Sonia Gipson-Rankin, David Urias, and Aja Brooks.

Environmental Justice and the Clean Air Act, Barry University, Dwayne O. Andreas School of Law, June 11, 2020 (via Zoom).

Black Lives Matter: A UNM School of Law Virtual Teach-In, June 5, 2020. Organizer and moderator, with presentations by Leon Howard, Dean Alfred Mathewson, Prof. Maryam Ahranjani, Prof. Josh Kastenberg, Prof. George Bach, and Prof. Sonia Gipson-Rankin.

Environmental Justice: Before and After the Pandemic, Law & Society Ass'n annual meeting. Zoom panel with Carmen Gonzalez, Nadia Ahmad, Rebecca Bratspies, Ileana Porras, and Tom Romero II. May 28, 2020 (via Zoom).

COVID-19 Pandemic and Legal Response Authorities:

- California Western School of Law (Zoom presentation), May 13, 2020 (via Zoom).
- UNM School of Law CLE webinar, April 1, 2020 (via Zoom).

The Gold King Mine Spill: Environmental Law and Liability, University of Utah S.J. Quinney School of Law, Mar. 2, 2020.

A Silver Lining in the Silver Valley, Idaho Bench-Bar Conf., Boise, ID, Oct. 25, 2019.

Environmental Justice and the Law: An Introduction, New Mexico Water Law Conf., Santa Fe, NM, Oct. 4, 2019.

Environmental Justice in Indian Country, 10th Annual Tribal Leadership Conf., Santa Ana Pueblo, NM, Oct. 2, 2019.

Waters of the United States, New Mexico Water Comm. monthly luncheon, Albuquerque, NM, Aug. 21, 2019.

Environmental Law – Public Health Partnership, Albuquerque Health Care for the Homeless, May 14, 2019.
Environmental Justice: Reflections and Renewal, Elisabeth Haub School of Law at Pace University, White Plains, NY, April 24, 2019.

Character in Public Service, City University of New York (CUNY) School of Law, New York City, NY, March 14, 2019.

Disaster Response, Recovery, and Relief in Minority Communities, AALS Annual Meeting, New Orleans, LA, Jan. 3, 2019.

Minding the Mines: Permitting, Regulation, and Cleanup, presented at *Recent Developments in New Mexico Natural Resources Law,* Natural Resources, Energy, and Environmental Law Section CLE. Albuquerque, NM, Dec. 21, 2018.

Environmental Public Health Network (keynote presentation to network of public health and environmental professionals). Albuquerque, NM, Dec. 6, 2018.

Environmental Justice and the Law: An Introduction, Envt'l Justice for Washington and Beyond, 3rd Ann. Envt'l Law Symposium, U. of Washington School of Law, Seattle, WA, Nov. 2, 2018.

Climate Change and CERCLA, Maryland-Pace Environmental Law Alliance, Sept. 19, 2018 (guest lecture via videoconference to law students at Maryland, Pace, and Houston).

Flint Drinking Water Contamination: Lessons for New Mexico, 3rd Ann. Conf. on Envt'l Conditions of the Animas & San Juan Watersheds, Farmington, NM, June 21, 2018.

The Animas River Spill: Environmental Law and Liability, Rocky Mountain Mineral Law Foundation Ann. Institute, Natural Resources Law Teachers Luncheon (keynote presentation), Santa Fe, NM, July 20, 2017.

Drawing the Line at daPL: Responding to "Trumpism" and the Legacies of Settler Colonialism (discussant), UNM School of Architecture and Planning, Albuquerque, NM, Feb. 27, 2017.

Is the "Act of God" Dead?—

- UNM School of Law, Albuquerque, NM, Sept. 25, 2017
- U. of Denver Sturm College of Law, Denver, CO, Feb. 15, 2017.
- U. of Houston Law Center, Houston, TX, Feb. 13, 2017.
- U. of Washington School of Law, Seattle, WA, Jan. 20, 2017.

The Water Quantity/Water Quality Connection: Continuing Stories, NM Water Judges Seminar, Albuquerque, NM, Nov. 4, 2016.

Professional Responsibility for Government Lawyers: A "Different Balance" (legal ethics presentation), Conf. of Gov't Mining Attorneys, Santa Fe, NM, Sept. 21, 2016.

Flint Drinking Water Contamination: Frames of Reference—

- Harvard Law School, April 13, 2016.
- Seattle U. School of Law, Seattle, WA, Mar. 21, 2016.
- U. Nevada-Las Vegas Boyd School, Las Vegas, NV, Feb. 8, 2016.
- UNM School of Law, Albuquerque, NM, Feb. 3, 2016.

The Animas River Spill: Causes, Impacts, and Legal Implications, CLE presentation, UNM School of Law, Albuquerque, NM. Oct. 2015.

Supreme Court Review (2014-15), CLE presentation with Andy Schultz and Prof. Serge Martinez, Albuquerque Bar Ass'n, Albuquerque, NM. June 2015.

Reflections on the Tenth Anniversary of Katrina, Roundtable Session at the Law and Society Ass'n ann. conference, *Law's Promise and Law's Pathos in the Global North and Global South*. Seattle, WA. May 2015.

Environmental Concerns and Public Participation in Oil Spill Response Planning. Panel presentation at 33rd Ann. Public Interest Environmental Law Conference, University of Oregon School of Law. Eugene, OR. March 2015.

Environmental Rights. Session chair for "Just Sustainability: Hope for the Commons" conference at Seattle University, sponsored by Center for Environmental Justice and Sustainability. Aug. 2014.

Disaster Management and the United States' Experience. Presented at the School of the SEA, Bantayan Island, The Philippines. April 2014.

EPA's Role in Disaster Response. Webinar sponsored by EPA National Enforcement Training Institute. May 2013.

Environmental Justice and the Law. Heritage University, Toppenish, WA. Oct. 2011.

Constitutional Law and the On-Scene Coordinator. Webinar sponsored by U.S. EPA Readiness Training Board. Aug. 2011.

You Can't Always Get What You Want: EPA in Court (2009). Keynote speech at national On-Scene Coordinators Readiness Training. Orlando, FL. Feb. 2010.

Professional Responsibility and Environmental Law: For Government Lawyers, a Different Balance. Ethics CLE workshop presented at 26th annual Public Interest Environmental Law Conference, University of Oregon School of Law. Eugene, OR. March 2008.

Información Ambiental y El Sistema Americano. Presented in Spanish at "Jornadas de Verano: El Derecho de Información Ambiental y El Ámbito Municipal," in conjunction with the University of Alicante. Finestrat, Spain. July 2005.

Hipotética Mineria: La Cuenca del Corazón de la Lechuza. Presented in Spanish at "Taller de Cooperación: El Tratado Libre y La Restauración de Los Daños Naturales," sponsored by U.S. State Dept. Santiago, Chile. Sept. 2004.

Superfund Meets TMDLs. Presented at "Getting It Done: TMDL Implementation in Watershed Restoration," sponsored by Washington State University. Stevenson, WA. Oct. 2003.

SELECTED MEDIA APPEARANCES

Environmental Justice in New Mexico, Resilient New Mexico (podcast), Aug. 2021.

The Long Fight for Environmental Justice Continues, Bloomberg News, (June 10, 2021), available at https://www.youtube.com/watch?v=Ylx1TT93XOo.

Protecting Vulnerable Waterways, New Mexico in Focus, KNME-TV, Ch. 5 (May 21, 2021), available at https://www.youtube.com/watch?v=ANNbxzwIlVQ.

UNM Law Students Help Pueblos Fight to Protect Clean Water, KRQE-TV, Ch. 13 (Mar. 30, 2021). TV interview discussing civil complaint filed by the UNM Natural Resources and Environmental Law clinic on behalf of tribal clients to challenge Trump rule narrowing scope of Waters of the United States, available at https://www.krqe.com/video/unm-law-students-help-pueblos-fight-to-protect-clean-water/6486902/.

Let's Talk Protecting Endangered Species, KUNM – 89.9 FM, Albuquerque (Aug. 29, 2019). Hour-long radio call-in show addressing new Trump rules reducing protections for threatened and endangered species.

Law Professor Describes Gold King Mine's Superfund Designation, KOB-TV, Ch. 4 (Sept.12, 2016). Live TV interview discussing recent listing of Gold King Mine area as designated Superfund site.

Here and There with David Marash, KSFR – 101.1 FM, Santa Fe (Feb. 17, 2016). Hour-long radio show on contamination of drinking water in Flint, Michigan.

Interview on KOB-TV, Ch. 4 Albuquerque (Oct. 26, 2015). With Prof. Carol Suzuki and students from my Constitutional Rights class, commentary after watching oral arguments before NM Supreme Court in *Morris v. Brandenburg*, broadcast via livestream at UNM School of Law.

Who Pays for Animas and San Juan River Cleanup?, KUNM – 89.9 FM, Albuquerque (Aug. 20, 2015). Hour-long radio call-in show on Gold King Mine spill and Animas River cleanup.

Experto Explica Como el Derrame Puede Afectar a la Comunidad, Univisión-TV, Ch. 41, Albuquerque (Aug. 12, 2015). Interview with Spanish-language TV news station on impacts of Gold King Mine Spill and on-going response actions.

Ponds Slow Down Water at Spill Site, KOAT-TV, Ch. 7, Albuquerque (Aug. 12, 2015). TV news interview on early response actions to Gold King Mine spill.

SELECTED HONORS

Ron & Susan Friedman Faculty Excellence Award (July 2021)

Keleher & McLeod Professor of Law (2018-2020)

Haub Envt'l Law Distinguished Junior Scholar, Pace University Haub School of Law (2018-2019)

Distinguished Environmental Law Graduate, Lewis & Clark Law School (2013)

EPA Region 10 Environmental Justice Award (2012)

Outstanding Adjunct Faculty Award, Seattle University School of Law (2009)

Gold Medal for Commendable Service, U.S. EPA (2009)

Modelo de Excelencia award, Latina/o Bar Ass'n of Washington (2008)

Silver Medal for Commendable Service, U.S. EPA (2006)

Certificate of Commendation, U.S. Dept. of Justice (2002)

PROFESSIONAL AFFILIATIONS

Tenth Circuit Court of Appeals. Active member in good standing

U.S. District Court of New Mexico. Active member in good standing.

Washington State Bar Ass'n. Active member in good standing.

Oregon State Bar. Inactive member.

PERSONAL INTERESTS

Hiking, fishing, travel, writing, photography.

CCP AND NAVA EP EXHIBIT 8

REBUTTAL TESTIMONY OF JAMES POVIJUA

I. CENTER FOR CIVIC POLICY URGES EIB TO ADOPT THE REVISED JOINT PROPOSAL PUT FORTH BY CCP, NAVA EDUCATION PROJECT, ENVIRONMENTAL DEFENSE FUND, AND WESTERN ENVIRONMENTAL LAW CENTER

I am James Povijua, the Policy Director for Center for Civic Policy (CCP). I previously provided direct testimony on my background and personal experiences. (CCP and NAVA Education Project (NAVA EP) Notice of Intent to Present Direct Testimony from Non-Technical Witnesses, Ex. 3).

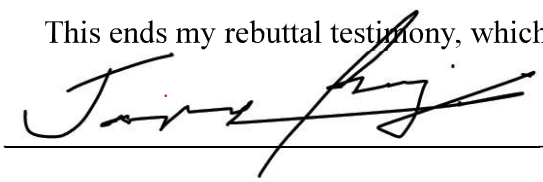
CCP and NAVA EP recommends that the EIB adopt the revised joint proposed amendments to the ozone precursor rule as set forth in CCP and NAVA EP Exhibit 5.

Based on discussions of the parties, and the parties' responses to the other parties' proposals, CCP and NAVA EP agree that the revised joint proposed amendments contain proposals that strengthen the rule proposed by NMED.

The revised joint proposed amendments are important to better protect the public health and the environment from one of the largest sources of oil and gas pollution, including to reduce zone formation as well as to reduce direct emissions of VOCs and greenhouse gases.

Based on my personal knowledge and the policy positions of CCP, I, along with NAVA EP, encourage and support our coalition's revised joint proposed amendments to the ozone precursor rule proposed by NMED.

This ends my rebuttal testimony, which is accurate to the best of my knowledge.



Sept. 7th, 2021

James Povijua (Warren James Honaberger)

Date